FIFTY YEARS OF ISAAC ASIMOV!

THE ASIMOV CHRONICLES

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VOLUME THREE

EDITED BY MARTIN H. GREENBERG

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The neighboring planetoid rose to zenith, passed overhead, began sinking.

Rioz called into his radio, "Hey, Dick, are you dead in there?"

"I'm checking," came Swenson's muffled response.

"Is the planetoid moving?" asked Long.

"Yes."

"Toward us?"

There was a pause. Swenson's voice was a sick one. "On the nose, Ted. Intersection of orbits will take place in three days."

"You're crazy!" yelled Rioz.

"I checked four times," said Swenson.

Long thought blankly, What do we do now?

—from "The Martian Way"

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ACE BOOKS, NEW YORK

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VOLUME THREE

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THE ASIMOV CHRONICLES

THE MARTIAN WAY

From the doorway of the short corridor between the only two rooms in the travel-head of the spaceship, Mario Esteban Rioz watched sourly as Ted Long adjusted the video dials painstakingly. Long tried a touch clockwise, then a touch counter. The picture was lousy.

Rioz knew it would stay lousy. They were too far from Earth and at a bad position facing the Sun. But then Long would not be expected to know that. Rioz remained standing in the doorway for an additional moment, head bent to clear the upper lintel, body turned half sidewise to fit the narrow opening. Then he jerked into the galley like a cork popping out of a bottle.

"What are you after?" he asked.

"I thought I'd get Hilder," said Long.

Rioz propped his rump on the corner of a table shelf. He lifted a conical can of milk from the companion shelf just above his head. Its point popped under pressure. He swirled it gently as he waited for it to warm.

"What for?" he said. He upended the cone and sucked noisily.

"Thought I'd listen."

"I think it's a waste of power."

Long looked up, frowning. "It's customary to allow free use of personal video sets."

"Within reason," retorted Rioz.

Their eyes met challengingly. Rioz had the rangy body, the gaunt, cheek-sunken face that was almost the hallmark of the Martian Scavenger, those Spacers who patiently haunted the space routes between Earth and Mars. Pale blue eyes were set keenly in the brown, lined face which, in turn, stood darkly out against the white surrounding synthofur that lined the up-turned collar of his leathtic space jacket.

Long was altogether paler and softer. He bore some of the marks of the Grounder, although no second-generation Martian could be a Grounder in the sense that Earthmen were. His own collar was thrown back and his dark brown hair freely exposed.

"What do you call within reason?" demanded Long.

Rioz's thin lips grew thinner. He said, "Considering that we're not even going to make expenses this trip, the way it looks, any power drain at all is outside reason."

Long said, "If we're losing money, hadn't you better get back to your post? It's your watch."

Rioz grunted and ran a thumb and forefinger over the stubble on his chin. He got up and trudged to the door, his soft, heavy boots muting the sound of his steps. He paused to look at the thermostat, then turned with a flare of fury.

"I *thought* it was hot. Where do you think you are?"

Long said, "Forty degrees isn't excessive."

"For you it isn't, maybe. But this is space, not a heated office at the iron mines." Rioz swung the thermostat control down to minimum with a quick thumb movement. "Sun's warm enough."

"The galley isn't on Sunside."

"It'll percolate through, damn it."

Rioz stepped through the door and Long stared after him for a long moment, then turned back to the video. He did not turn up the thermostat.

The picture was still flickering badly, but it would have to do. Long folded a chair down out of the wall. He leaned forward waiting through the formal announcement, the

momentary pause before the slow dissolution of the curtain, the spotlight picking out the well-known bearded figure which grew as it was brought forward until it filled the screen.

The voice, impressive even through the flutings and croakings induced by the electron storms of twenty millions of miles, began:

"Friends! My fellow citizens of Earth . . ."

2

Rioz's eye caught the flash of the radio signal as he stepped into the pilot room. For one moment, the palms of his hands grew clammy when it seemed to him that it was a radar pip; but that was only his guilt speaking. He should not have left the pilot room while on duty theoretically, though all Scavengers did it. Still, it was the standard nightmare, this business of a strike turning up during just those five minutes when one knocked off for a quick coffee because it seemed certain that space was clear. And the nightmare had been known to happen, too.

Rioz threw in the multi-scanner. It was a waste of power, but while he was thinking about it, he might as well make sure.

Space was clear except for the far-distant echoes from the neighboring ships on the scavenging line.

He hooked up the radio circuit, and the blond, long-nosed head of Richard Swenson, copilot of the next ship on the Marsward side, filled it.

"Hey, Mario," said Swenson.

"Hi. What's new?"

There was a second and a fraction of pause between that and Swenson's next comment, since the speed of electromagnetic radiation is not infinite.

"What a day I've *had*."

"Something happened?" Rioz asked.

"I had a strike."

"Well, good."

"Sure, if I'd roped it in," said Swenson morosely.

"What happened?"

"Damn it, I headed in the wrong direction."

Rioz knew better than to laugh. He said, "How did you do that?"

"It wasn't my fault. The trouble was the shell was moving way out of the ecliptic. Can you imagine the stupidity of a pilot that can't work the release maneuver decently? How was I to know? I got the distance of the shell and let it go at that. I just assumed its orbit was in the usual trajectory family. Wouldn't you? I started along what I thought was a good line of intersection and it was five minutes before I noticed the distance was still going up. The pips were taking their sweet time returning. So then I took the angular projections of the thing, and it was too late to catch up with it."

"Any of the other boys getting it?"

"No. It's way out of the ecliptic and'll keep on going forever. That's not what bothers me so much. It was only an inner shell. But I hate to tell you how many tons of propulsion I wasted getting up speed and then getting back to station. You should have heard Canute."

Canute was Richard Swenson's brother and partner.

"Mad, huh?" said Rioz.

"Mad? Like to have killed me! But then we've been out five months now and it's getting kind of sticky. You know."

"I know."

"How are you doing, Mario?"

Rioz made a spitting gesture. "About that much this trip. Two shells in the last two weeks and I had to chase each one for six hours."

"Big ones?"

"Are you kidding? I could have scaled them down to Phobos by hand. This is the worst trip I've ever had."

"How much longer are you staying?"

"For my part, we can quit tomorrow. We've only been

out two months and it's got so I'm chewing Long out all the time."

There was a pause over and above the electromagnetic lag.

Swenson said, "What's he like, anyway? Long, I mean."

Rioz looked over his shoulder. He could hear the soft, crackly mutter of the video in the galley. "I can't make him out. He says to me about a week after the start of the trip, 'Mario, why are you a Scavenger?' I just look at him and say, 'To make a living. Why do you suppose?' I mean, what the hell kind of a question is that? Why is anyone a Scavenger?

"Anyway, he says, 'That's not it, Mario.' *He's* telling *me*, you see. He says, 'You're a Scavenger because this is part of the Martian way.' "

Swenson said, "And what did he mean by that?"

Rioz shrugged. "I never asked him. Right now he's sitting in there listening to the ultra-microwave from Earth. He's listening to some Grounder called Hilder."

"Hilder? A Grounder politician, an Assemblyman or something, isn't he?"

"That's right. At least, I think that's right. Long is always doing things like that. He brought about fifteen pounds of books with him, all about Earth. Just plain dead weight, you know."

"Well, he's your partner. And talking about partners, I think I'll get back on the job. If I miss another strike, there'll be murder around here."

He was gone and Rioz leaned back. He watched the even green line that was the pulse scanner. He tried the multi-scanner a moment. Space was still clear.

He felt a little better. A bad spell is always worse if the Scavengers all about you are pulling in shell after shell; if the shells go spiraling down to the Phobos scrap forges with everyone's brand welded on except your own. Then, too, he had managed to work off some of his resentment toward Long.

It was a mistake teaming up with Long. It was always a mistake to team up with a tenderfoot. They thought what you wanted was conversation, especially Long, with his eternal theories about Mars and its great new role in human progress. That was the way he said it—Human Progress: the Martian Way; the New Creative Minority. And all the time what Rioz wanted wasn't talk, but a strike, a few shells to call their own.

At that, he hadn't any choice, really. Long was pretty well known down on Mars and made good pay as a mining engineer. He was a friend of Commissioner Sankov and he'd been out on one or two short scavenging missions before. You can't turn a fellow down flat before a tryout, even though it did look funny. Why should a mining engineer with a comfortable job and good money want to muck around in space?

Rioz never asked Long that question. Scavenger partners are forced too close together to make curiosity desirable, or sometimes even safe. But Long talked so much that he answered the question.

"I had to come out here, Mario," he said. "The future of Mars isn't in the mines; it's in space."

Rioz wondered how it would be to try a trip alone. Everyone said it was impossible. Even discounting lost opportunities when one man had to go off watch to sleep or attend to other things, it was well known that one man alone in space would become intolerably depressed in a relatively short while.

Taking a partner along made a six-month trip possible. A regular crew would be better, but no Scavenger could make money on a ship large enough to carry one. The capital it would take in propulsion alone!

Even two didn't find it exactly fun in space. Usually you had to change partners each trip and you could stay out longer with some than with others. Look at Richard and Canute Swenson. They teamed up every five or six trips because they were brothers. And yet whenever they did, it

was a constantly mounting tension and antagonism after the first week.

Oh well. Space was clear. Rioz would feel a little better if he went back in the galley and smoothed down some of the bickering with Long. He might as well show he was an old spacehand who took the irritations of space as they came.

He stood up, walked the three steps necessary to reach the short, narrow corridor that tied together the two rooms of the spaceship.

3

Once again Rioz stood in the doorway for a moment, watching. Long was intent on the flickering screen.

Rioz said gruffly, "I'm shoving up the thermostat. It's all right—we can spare the power."

Long nodded. "If you like."

Rioz took a hesitant step forward. Space was clear, so to hell with sitting and looking at a blank, green, pipless line. He said, "What's the Grounder been talking about?"

"History of space travel mostly. Old stuff, but he's doing it well. He's giving the whole works—color cartoons, trick photography, stills from old films, everything."

As if to illustrate Long's remarks, the bearded figure faded out of view, and a cross-sectional view of a spaceship flitted onto the screen. Hilder's voice continued, pointing out features of interest that appeared in schematic color. The communications system of the ship outlined itself in red as he talked about it, the storerooms, the proton micropile drive, the cybernetic circuits . . .

Then Hilder was back on the screen. "But this is only the travel-head of the ship. What moves it? What gets it off the Earth?"

Everyone knew what moved a spaceship, but Hilder's voice was like a drug. He made spaceship propulsion sound like the secret of the ages, like an ultimate revelation. Even

Rioz felt a slight tingling of suspense, though he had spent the greater part of his life aboard ship.

Hilder went on. "Scientists call it different names. They call it the Law of Action and Reaction. Sometimes they call it Newton's Third Law. Sometimes they call it Conservation of Momentum. But we don't have to call it any name. We can just use our common sense. When we swim we push water backward and move forward ourselves. When we walk, we push back against the ground and move forward. When we fly a gyro-flivver, we push air backward and move forward.

"Nothing can move forward unless something else moves backward. It's the old principle of 'You can't get something for nothing.'

"Now imagine a spaceship that weighs a hundred thousand tons lifting off Earth. To do that, something else must be moved downward. Since a spaceship is extremely heavy, a great deal of material must be moved downward. So much material, in fact, that there is no place to keep it all aboard ship. A special compartment must be built behind the ship to hold it."

Again Hilder faded out and the ship returned. It shrank and a truncated cone appeared behind it. In bright yellow, words appeared within it: MATERIAL TO BE THROWN AWAY.

"But now," said Hilder, "the total weight of the ship is much greater. You need still more propulsion and still more."

The ship shrank enormously to add on another larger shell and still another immense one. The ship proper, the travel-head, was a little dot on the screen, a glowing red dot.

Rioz said, "Hell, this is kindergarten stuff."

"Not to the people he's speaking to, Mario," replied Long. "Earth isn't Mars. There must be billions of Earth people who've never seen a spaceship; don't know the first thing about it."

Hilder was saying, "When the material inside the biggest shell is used up, the shell is detached. It's thrown away, too."

The outermost shell came loose, wobbled about the screen.

"Then the second one goes," said Hilder, "and then, if the trip is a long one, the last is ejected."

The ship was just a red dot now, with three shells shifting and moving, lost in space.

Hilder said, "These shells represent a hundred thousand tons of tungsten, magnesium, aluminum, and steel. They are gone forever from Earth. Mars is ringed by Scavengers, waiting along the routes of space travel, waiting for the cast-off shells, netting and branding them, saving them for Mars. Not one cent of payment reaches Earth for them. They are salvage. They belong to the ship that finds them."

Rioz said, "We risk our investment and our lives. If we don't pick them up, no one gets them. What loss is that to Earth?"

"Look," said Long, "he's been talking about nothing but the drain that Mars, Venus, and the Moon put on Earth. This is just another item of loss."

"They'll get their return. We're mining more iron every year."

"And most of it goes right back into Mars. If you can believe his figures, Earth has invested two hundred billion dollars in Mars and received back about five billion dollars' worth of iron. It's put five hundred billion dollars into the Moon and gotten back a little over twenty-five billion dollars of magnesium, titanium, and assorted light metals. It's put fifty billion dollars into Venus and gotten back nothing. And that's what the taxpayers of Earth are really interested in—tax money out; nothing in."

The screen was filled, as he spoke, with diagrams of the Scavengers on the route to Mars; little, grinning caricatures of ships, reaching out wiry, tenuous arms that groped for the tumbling, empty shells, seizing and snaking them in,

branding them MARS PROPERTY in glowing letters, then scaling them down to Phobos.

Then it was Hilder again. "They tell us eventually they will return it all to us. Eventually! Once they are a going concern! We don't know when that will be. A century from now? A thousand years? A million? 'Eventually.' Let's take them at their word. Someday they will give us back all our metals. Someday they will grow their own food, use their own power, live their own lives.

"But one thing they can never return. Not in a hundred million years. *Water!*

"Mars has only a trickle of water because it is too small. Venus has no water at all because it is too hot. The Moon has none because it is too hot and too small. So Earth must supply not only drinking water and washing water for the Spacers, water to run their industries, water for the hydroponic factories they claim to be setting up—but even water to throw away by the millions of tons.

"What is the propulsive force that spaceships use? What is it they throw behind so that they can accelerate forward? Once it was the gases generated from explosives. That was very expensive. Then the proton micropile was invented—a cheap power source that could heat up any liquid until it was a gas under a tremendous pressure. What is the cheapest and most plentiful liquid available? Why, water, of course.

"Each spaceship leaves Earth carrying nearly a million tons—not pounds, *tons*—of water, for the sole purpose of driving it into space, so that it may speed up or slow down.

"Our ancestors burned the oil of Earth madly and willfully. They destroyed its coal recklessly. We despise and condemn them for that, but at least they had this excuse—they thought that when the need arose, substitutes would be found. And they were right. We have our plankton farms and our proton micropiles.

"But there is no substitute for water. None! There never can be. And when our descendants view the desert we will

have made of Earth, what excuse will they find for us? When the droughts come and grow—"

Long leaned forward and turned off the set. He said, "That bothers me. The damn fool is deliberately—What's the matter?"

Rioz had risen uneasily to his feet. "I ought to be watching the pips."

"The hell with the pips." Long got up likewise, followed Rioz through the narrow corridor, and stood just inside the pilot room. "If Hilder carries this through, if he's got the guts to make a real issue out of it—*Wow!*"

He had seen it too. The pip was a Class A, racing after the outgrowing signal like a greyhound after a mechanical rabbit.

Rioz was babbling, "Space was clear, I tell you, *clear*. For Mar's sake, Ted, don't just freeze on me. See if you can spot it visually."

Rioz was working speedily and with an efficiency that was the result of nearly twenty years of scavenging. He had the distance in two minutes. Then, remembering Swenson's experience, he measured the angle of declination and the radial velocity as well.

He yelled at Long, "One point seven six radians. You can't miss it, man."

Long held his breath as he adjusted the vernier. "It's only half a radian off the Sun. It'll only be crescent-lit."

He increased magnification as rapidly as he dared, watching for the one "star" that changed position and grew to have a form, revealing itself to be no star.

"I'm starting, anyway," said Rioz. "We can't wait."

"I've got it. I've got it." Magnification was still too small to give it a definite shape, but the dot Long watched was brightening and dimming rhythmically as the shell rotated and caught sunlight on cross sections of different sizes.

"Hold on."

The first of many fine spurts of steam squirted out of the proper vents, leaving long trails of micro-crystals of ice

gleaming mistily in the pale beams of the distant Sun. They thinned out for a hundred miles or so. One spurt, then another, then another, as the Scavenger ship moved out of its stable trajectory and took up a course tangential to that of the shell.

"It's moving like a comet at perihelion!" yelled Rioz. "Those damned Grounder pilots knock the shells off that way on purpose. I'd like to—"

He swore his anger in a frustrated frenzy as he kicked steam backward and backward recklessly, till the hydraulic cushioning of his chair had soughed back a full foot and Long had found himself all but unable to maintain his grip on the guard rail.

"Have a heart," he begged.

But Rioz had his eye on the pips. "If you can't take it, man, stay on Mars!" The steam spurts continued to boom distantly.

The radio came to life. Long managed to lean forward through what seemed like molasses and closed contact. It was Swenson, eyes glaring.

Swenson yelled, "Where the hell are you guys going? You'll be in my sector in ten seconds."

Rioz said, "I'm chasing a shell."

"In *my* sector?"

"It started in mine and you're not in position to get it. Shut off that radio, Ted."

The ship thundered through space, a thunder that could be heard only within the hull. And then Rioz cut the engines in stages large enough to make Long flail forward. The sudden silence was more ear-shattering than the noise that had preceded it.

Rioz said, "All right. Let me have the 'scope."

They both watched. The shell was a definite truncated cone now, tumbling with slow solemnity as it passed along among the stars.

"It's a Class A shell, all right," said Rioz with satisfac-

tion. A giant among shells, he thought. It would put them into the black.

Long said, "We've got another pip on the scanner. I think it's Swenson taking after us."

Rioz scarcely gave it a glance. "He won't catch us."

The shell grew larger still, filling the visiplate.

Rioz's hands were on the harpoon lever. He waited, adjusted the angle microscopically twice, played out the length allotment. Then he yanked, tripping the release.

For a moment, nothing happened. Then a metal mesh cable snaked out onto the visiplate, moving toward the shell like a striking cobra. It made contact, but it did not hold. If it had, it would have snapped instantly like a cobweb strand. The shell was turning with a rotational momentum amounting to thousands of tons. What the cable did do was set up a powerful magnetic field that acted as a brake on the shell.

Another cable and another lashed out. Rioz sent them out in an almost heedless expenditure of energy.

"I'll get this one! By Mars, I'll get this one!"

With some two dozen cables stretching between ship and shell, he desisted. The shell's rotational energy, converted by breaking into heat, had raised its temperature to a point where its radiation could be picked up by the ship's meters.

Long said, "Do you want me to put our brand on?"

"Suits me. But you don't have to if you don't want to. It's my watch."

"I don't mind."

Long clambered into his suit and went out the lock. It was the surest sign of his newness to the game that he could count the number of times he had been out in space in a suit. This was the fifth time.

He went out along the nearest cable, hand over hand, feeling the vibration of the mesh against the metal of his mitten.

He burned their serial number in the smooth metal of the shell. There was nothing to oxidize the steel in the empti-

ness of space. It simply melted and vaporized, condensing some feet away from the energy beam, turning the surface it touched into a gray, powdery dullness.

Long swung back toward the ship.

Inside again, he took off his helmet, white and thick with frost that collected as soon as he had entered.

The first thing he heard was Swenson's voice coming over the radio in this almost unrecognizable rage: ". . . straight to the Commissioner. Damn it, there are rules to this game!"

Rioz sat back, unbothered. "Look, it hit my sector. I was late spotting it and I chased it into yours. You couldn't have gotten it with Mars for a backstop. That's all there is to it—You back, Long?"

He cut contact.

The signal button raged at him, but he paid no attention.

"He's going to the Commissioner?" Long asked.

"Not a chance. He just goes on like that because it breaks the monotony. He doesn't mean anything by it. He knows it's our shell. And how do you like that hunk of stuff, Ted?"

"Pretty good."

"Pretty good? It's terrific! Hold on. I'm setting it swinging."

The side jets spat steam and the ship started a slow rotation about the shell. The shell followed it. In thirty minutes, they were a gigantic bolo spinning in emptiness. Long checked the *Ephemeris* for the position of Deimos.

At a precisely calculated moment, the cables released their magnetic field and the shell went streaking off tangentially in a trajectory that would, in a day or so, bring it within pronging distance of the shell stores on the Martian satellite.

Rioz watched it go. He felt good. He turned to Long. "This is one fine day for us."

"What about Hilder's speech?" asked Long.

"What? Who? Oh, that. Listen, if I had to worry about

every thing some damned Grounder said, I'd never get any sleep. Forget it."

"I don't think we should forget it."

"You're nuts. Don't bother me about it, will you? Get some sleep instead."

4

Ted Long found the breadth and height of the city's main thoroughfare exhilarating. It had been two months since the Commissioner had declared a moratorium on scavenging and had pulled all ships out of space, but this feeling of a stretched-out vista had not stopped thrilling Long. Even the thought that the moratorium was called pending a decision on the part of Earth to enforce its new insistence on water economy, by deciding upon a ration limit for scavenging, did not cast him entirely down.

The roof of the avenue was painted a luminous light blue, perhaps as an old-fashioned imitation of Earth's sky. Ted wasn't sure. The walls were lit with the store windows that pierced it.

Off in the distance, over the hum of traffic and the sloughing noise of people's feet passing him, he could hear the intermittent blasting as new channels were being bored into Mars' crust. All his life he remembered such blastings. The ground he walked on had been part of solid, unbroken rock when he was born. The city was growing and would keep on growing—if Earth would only let it.

He turned off at a cross street, narrower, not quite as brilliantly lit, shop windows giving way to apartment houses, each with its row of lights along the front facade. Shoppers and traffic gave way to slower-paced individuals and to squawling youngsters who had as yet evaded the maternal summons to the evening meal.

At the last minute, Long remembered the social amenities and stopped off at a corner water store.

He passed over his canteen. "Fill 'er up."

The plump storekeeper unscrewed the cap, cocked an eye into the opening. He shook it a little and let it gurgle. "Not much left," he said cheerfully.

"No," agreed Long.

The storekeeper trickled water in, holding the neck of the canteen close to the hose tip to avoid spillage. The volume gauge whirred. He screwed the cap back on.

Long passed over the coins and took his canteen. It clanked against his hip now with a pleasing heaviness. It would never do to visit a family without a full canteen. Among the boys, it didn't matter. Not as much, anyway.

He entered the hallway of No. 27, climbed a short flight of stairs, and paused with his thumb on the signal.

The sound of voices could be heard quite plainly.

One was a woman's voice, somewhat shrill. "It's all right for you to have your Scavenger friends here, isn't it? I'm supposed to be thankful you manage to get home two months a year. Oh, it's quite enough that you spend a day or two with me. After that, it's the Scavengers again."

"I've been home for a long time now," said a male voice, "and this is business. For Mars' sake, let up, Dora. They'll be here soon."

Long decided to wait a moment before signaling. It might give them a chance to hit a more neutral topic.

"What do I care if they come?" retorted Dora. "Let them hear me. And I'd just as soon the Commissioner kept the moratorium on permanently. You hear me?"

"And what would we live on?" came the male voice hotly. "You tell me that."

"I'll tell you. You can make a decent, honorable living right here on Mars, just like everybody else. I'm the only one in this apartment house that's a Scavenger widow. That's what I am—a widow. I'm worse than a widow, because if I were a widow, I'd at least have a chance to marry someone else—What did you say?"

"Nothing. Nothing at all."

"Oh, I know what you said. Now listen here, Dick Swenson—"

"I only said," cried Swenson, "that now I know why Scavengers usually don't marry."

"You shouldn't have either. I'm tired of having every person in the neighborhood pity me and smirk and ask when you're coming home. Other people can be mining engineers and administrators and even tunnel borers. At least tunnel borers' wives have a decent home life and their children don't grow up like vagabonds. Peter might as well not have a father—"

A thin boy-soprano voice made its way through the door. It was somewhat more distant, as though it were in another room. "Hey, Mom, what's a vagabond?"

Dora's voice rose a notch. "Peter! You keep your mind on your homework."

Swenson said in a low voice, "It's not right to talk this way in front of the kid. What kind of notions will he get about me?"

"Stay home then and teach him better notions."

Peter's voice called again. "Hey, Mom, I'm going to be a Scavenger when I grow up."

Footsteps sounded rapidly. There was a momentary hiatus in the sounds, then a piercing, "Mom! Hey, Mom! Leggo my ear! What did I do?" and a snuffling silence.

Long seized the chance. He worked the signal vigorously.

Swenson opened the door, brushing down his hair with both hands.

"Hello, Ted," he said in a subdued voice. Then loudly, "Ted's here, Dora. Where's Mario, Ted?"

Long said, "He'll be here in a while."

Dora came bustling out of the next room, a small, dark woman with a pinched nose, and hair, just beginning to show touches of gray, combed off the forehead.

"Hello, Ted. Have you eaten?"

"Quite well, thanks. I haven't interrupted you, have I?"

"Not at all. We finished ages ago. Would you like some coffee?"

"I think so." Ted unslung his canteen and offered it.

"Oh, goodness, that's all right. We've plenty of water."

"I insist."

"Well, then—"

Back into the kitchen she went. Through the swinging door, Long caught a glimpse of dishes sitting in Secoterg, the "waterless cleaner that soaks up and absorbs grease and dirt in a twinkling. One ounce of water will rinse eight square feet of dish surface clean as clean. Buy Secoterg. Secoterg just cleans it right, makes your dishes shiny bright, does away with water waste—"

The tune started whining through his mind and Long crushed it with speech. He said, "How's Pete?"

"Fine, fine. The kid's in the fourth grade now. You know I don't get to see him much. Well, sir, when I came back last time, he looked at me and said . . ."

It went on for a while and wasn't too bad as bright sayings of bright children as told by dull parents go.

The door signal burped and Mario Rioz came in, frowning and red.

Swenson stepped to him quickly. "Listen, don't say anything about shell-snaring. Dora still remembers the time you fingered a Class A shell out of my territory and she's in one of her moods now."

"Who the hell wants to talk about shells?" Rioz slung off a fur-lined jacket, threw it over the back of the chair, and sat down.

Dora came through the swinging door, viewed the newcomer with a synthetic smile, and said, "Hello, Mario. Coffee for you, too?"

"Yeah," he said, reaching automatically for his canteen.

"Just use some more of my water, Dora," said Long quickly. "He'll owe it to me."

"Yeah," said Rioz.

"What's wrong, Mario?" asked Long.

Rioz said heavily, "Go on. Say you told me so. A year ago when Hilder made that speech, you told me so. Say it."

Long shrugged.

Rioz said, "They've set up the quota. Fifteen minutes ago the news came out."

"Well?"

"Fifty thousand tons of water per trip."

"What?" yelled Swenson, burning. "You can't get off Mars with fifty thousand!"

"That's the figure. It's a deliberate piece of gutting. No more scavenging."

Dora came out with the coffee and set it down all around.

"What's all this about no more scavenging?" She sat down very firmly and Swenson looked helpless.

"It seems," said Long, "that they're rationing us at fifty thousand tons and that means we can't make any more trips."

"Well, what of it?" Dora sipped her coffee and smiled gaily. "If you want my opinion, it's a good thing. It's time all you Scavengers found yourselves a nice, steady job here on Mars. I mean it. It's no life to be running all over space—"

"Please, Dora," said Swenson.

Rioz came close to a snort.

Dora raised her eyebrows. "I'm just giving my opinions."

Long said, "Please feel free to do so. But I would like to say something. Fifty thousand is just a detail. We know that Earth—or at least Hilder's party—wants to make political capital out of a campaign for water economy, so we're in a bad hole. We've got to get water somehow or they'll shut us down altogether, right?"

"Well, sure," said Swenson.

"But the question is how, right?"

"If it's only getting water," said Rioz in a sudden gush of words, "there's only one thing to do and you know it. If the Grounders won't give us water, we'll take it. The water

doesn't belong to them just because their fathers and grandfathers were too damned sick-yellow ever to leave their fat planet. Water belongs to people wherever they are. We're people and the water's ours, too. We have a right to it."

"How do you propose taking it?" asked Long.

"Easy! They've got oceans of water on Earth. They can't post a guard over every square mile. We can sink down on the night side of the planet any time we want, fill our shells, then get away. How can they stop us?"

"In half a dozen ways, Mario. How do you spot shells in space up to distances of a hundred thousand miles? One thin metal shell in all that space. How? By radar. Do you think there's no radar on Earth? Do you think that if Earth ever gets the notion we're engaged in waterlegging, it won't be simple to set up a radar network to spot ships coming in from space?"

Dora broke in indignantly. "I'll tell you one thing, Mario Rioz. My husband isn't going to be part of any raid to get water to keep up his scavenging with."

"It isn't just scavenging," said Mario. "Next they'll be cutting down on everything else. We've got to stop them now."

"But we don't need their water anyway," said Dora. "We're not the Moon or Venus. We pipe enough water down from the polar caps for all we need. We have a water tap right in this apartment. There's one in every apartment on this block."

Long said, "Home use is the smallest part of it. The mines use water. And what do we do about the hydroponic tanks?"

"That's right," said Swenson. "What about the hydroponic tanks, Dora? They've got to have water and it's about time we arranged to grow our own fresh food instead of having to live on the condensed crud they ship us from Earth."

"Listen to him," said Dora scornfully. "What do you know about fresh food? You've never eaten any."

"I've eaten more than you think. Do you remember those carrots I picked up once?"

"Well, what was so wonderful about them? If you ask me, good baked protomeal is much better. And healthier, too. It just seems to be the fashion now to be talking fresh vegetables because they're increasing taxes for these hydroponics. Besides, all this will blow over."

Long said, "I don't think so. Not by itself, anyway. Hilder will probably be the next Co-ordinator, and then things may really get bad. If they cut down on food shipments, too—"

"Well, then," shouted Rioz, "what do we do? I still say take it! Take the water!"

"And I say we can't do that, Mario. Don't you see that what you're suggesting is the Earth way, the Grounder way? You're trying to hold on to the umbilical cord that ties Mars to Earth. Can't you get away from that? Can't you see the Martian way?"

"No, I can't. Suppose you tell me."

"I will, if you'll listen. When we think about the Solar System, what do we think about? Mercury, Venus, Earth, Moon, Mars, Phobos, and Deimos. There you are—seven bodies, that's all. But that doesn't represent 1 per cent of the Solar System. We Martians are right at the edge of the other 99 per cent. Out there, farther from the Sun, there's unbelievable amounts of water!"

The others stared.

Swenson said uncertainly, "You mean the layers of ice on Jupiter and Saturn?"

"Not that specifically, but it *is* water, you'll admit. A thousand-mile-thick layer of water is a lot of water."

"But it's all covered up with layers of ammonia or—or something, isn't it?" asked Swenson. "Besides, we can't land on the major planets."

"I know that," said Long, "but I haven't said that was the

answer. The major planets aren't the only objects out there. What about the asteroids and the satellites? Vesta is a two-hundred-mile-diameter asteroid that's hardly more than a chunk of ice. One of the moons of Saturn is mostly ice. How about that?"

Rioz said, "Haven't you ever been in space, Ted?"

"You know I have. Why do you ask?"

"Sure, I know you have, but you still talk like a Grounder. Have you thought of the distances involved? The average asteroid is a hundred twenty million miles from Mars at the closest. That's twice the Venus-Mars hop and you know that hardly any liners do even that in one jump. They usually stop off at Earth or the Moon. After all, how long do you expect anyone to stay in space, man?"

"I don't know. What's your limit?"

"You know the limit. You don't have to ask me. It's six months. That's handbook data. After six months, if you're still in space, you're psychotherapy meat. Right, Dick?"

Swenson nodded.

"And that's just the asteroids," Rioz went on. "From Mars to Jupiter is three hundred thirty million miles, and to Saturn it's seven hundred million. How can anyone handle that kind of distance? Suppose you hit standard velocity or, to make it even, say you get up to a good two hundred kilomiles an hour. It would take you—let's see, allowing time for acceleration and deceleration—about six or seven months to get to Jupiter and nearly a year to get to Saturn. Of course, you could hike the speed to a million miles an hour, theoretically, but where would you get the water to do that?"

"Gee," said a small voice attached to a smutty nose and round eyes, "Saturn!"

Dora whirled in her chair. "Peter, march right back into your room!"

"Aw, Ma."

"Don't 'Aw, Ma' me." She began to get out of the chair, and Peter scuttled away.

Swenson said, "Say, Dora, why don't you keep him company for a while? It's hard to keep his mind on homework if we're all out here talking."

Dora smiled obstinately and stayed put. "I'll sit right here until I find out what Ted Long is thinking of. I tell you right now I don't like the sound of it."

Swenson said nervously, "Well, never mind Jupiter and Saturn. I'm sure Ted isn't figuring on that. But what about Vesta? We could make it in ten or twelve weeks there and the same back. And two hundred miles in diameter. That's four million cubic miles of ice!"

"So what?" said Rioz. "What do we do on Vesta? Quarry the ice? Set up mining machinery? Say, do you know how long that would take?"

Long said, "I'm talking about Saturn, not Vesta."

Rioz addressed an unseen audience. "I tell him seven hundred million miles and he keeps on talking."

"All right," said Long, "suppose you tell me how you know we can only stay in space six months, Mario?"

"It's common knowledge, damn it."

"Because it's in the *Handbook of Space Flight*. It's data compiled by Earth scientists from experience with Earth pilots and spacemen. You're still thinking Grounder style. You won't think the Martian way."

"A Martian may be a Martian, but he's still a man."

"But how can you be so blind? How many times have you been out for over six months without a break?"

Rioz said, "That's different."

"Because you're Martians? Because you're professional Scavengers?"

"No. Because we're not on a flight. We can put back for Mars any time we want to."

"But you *don't* have to. That's my point. Earthmen have tremendous ships with libraries of film, with a crew of fifteen plus passengers. Still, they can only stay out six months maximum. Martian Scavengers have a two-room

ship with only one partner. But we can stick it out more than six months."

Dora said, "I suppose you want to stay in a ship for a year and go to Saturn."

"Why not, Dora?" said Long. "We can do it. Don't you see we can? Earthmen can't. They've got a real world. They've got open sky and fresh food, all the air and water they want. Getting into a ship is a terrible change for them. More than six months is too much for them for that very reason. Martians are different. We've been living on a ship our entire lives.

"That's all Mars is—a ship. It's just a big ship forty-five hundred miles across with one tiny room in it occupied by fifty thousand people. It's closed in like a ship. We breathe packaged air and drink packaged water, which we repurify over and over. We eat the same food rations we eat aboard ship. When we get into a ship, it's the same thing we've known all our lives. We can stand it for a lot more than a year if we have to."

Dora said, "Dick, too?"

"We all can."

"Well, Dick can't. It's all very well for you, Ted Long, and this shell stealer here, this Mario, to talk about jaunting off for a year. You're not married. Dick is. He has a wife and he has a child and that's enough for him. He can just get a regular job right here on Mars. Why, my goodness, suppose you go to Saturn and find there's no water there. How'll you get back? Even if you had water left, you'd be out of food. It's the most ridiculous thing I ever heard of."

"No. Now listen," said Long tightly. "I've thought this thing out. I've talked to Commissioner Sankov and he'll help. But we've got to have ships and men. I can't get them. The men won't listen to me. I'm green. You two are known and respected. You're veterans. If you back me, even if you don't go yourselves, if you'll just help me sell this thing to the rest, get volunteers—"

"First," said Rioz grumpily, "you'll have to do a lot more explaining. Once we get to Saturn, where's the water?"

"That's the beauty of it," said Long. "That's why it's got to be Saturn. The water there is just floating around in space for the taking."

5

When Hamish Sankov had come to Mars, there was no such thing as a native Martian. Now there were two-hundred-odd babies whose grandfathers had been born on Mars—native in the third generation.

When he had come as a boy in his teens, Mars had been scarcely more than a huddle of grounded spaceships connected by sealed underground tunnels. Through the years, he had seen buildings grow and burrow widely, thrusting blunt snouts up into the thin, unbreathable atmosphere. He had seen huge storage depots spring up into which spaceships and their loads could be swallowed whole. He had seen the mines grow from nothing to a huge gouge in the Martian crust, while the population of Mars grew from fifty to fifty thousand.

It made him feel old, these long memories—they and the even dimmer memories induced by the presence of this Earthman before him. His visitor brought up those long-forgotten scraps of thought about a soft-warm world that was as kind and gentle to mankind as the mother's womb.

The Earthman seemed fresh from that womb. Not very tall, not very lean; in fact, distinctly plump. Dark hair with a neat little wave in it, a neat little mustache, and neatly scrubbed skin. His clothing was right in style and as fresh and neatly turned as plastek could be.

Sankov's own clothes were of Martian manufacture, serviceable and clean, but many years behind the times. His face was craggy and lined, his hair was pure white, and his Adam's apple wobbled when he talked.

The Earthman was Myron Digby, member of Earth's General Assembly. Sankov was Martian Commissioner.

Sankov said, "This all hits us hard, Assemblyman."

"It's hit most of us hard, too, Commissioner."

"Uh-huh. Can't honestly say then that I can make it out. Of course, you understand, I don't make out that I can understand Earth ways, for all that I was born there. Mars is a hard place to live, Assemblyman, and you have to understand that. It takes a lot of shipping space just to bring us food, water, and raw materials so we can live. There's not much room left for books and news films. Even video programs can't reach Mars, except for about a month when Earth is in conjunction, and even then nobody has much time to listen.

"My office gets a weekly summary film from Planetary Press. Generally, I don't have time to pay attention to it. Maybe you'd call us provincial, and you'd be right. When something like this happens, all we can do is kind of helplessly look at each other."

Digby said slowly, "You can't mean that your people on Mars haven't heard of Hilder's anti-Waster campaign."

"No, can't exactly say that. There's a young Scavenger, son of a good friend of mine who died in space"—Sankov scratched the side of his neck doubtfully—"who makes a hobby out of reading up on Earth history and things like that. He catches video broadcasts when he's out in space and he listened to this man Hilder. Near as I can make out, that was the first talk Hilder made about Wasters.

"The young fellow came to me with that. Naturally, I didn't take him very serious. I kept an eye on the Planetary Press films for a while after that, but there wasn't much mention of Hilder and what there was made him out to look pretty funny."

"Yes, Commissioner," said Digby, "it all seemed quite a joke when it started."

Sankov stretched out a pair of long legs to one side of his desk and crossed them at the ankles. "Seems to me it's still

pretty much of a joke. What's his argument? We're using up water. Has he tried looking at some figures? I got them all here. Had them brought to me when this committee arrived.

"Seems that Earth has four hundred million cubic miles of water in its oceans and each cubic mile weighs four and a half billion tons. That's a lot of water. Now we use some of that heap in space flight. Most of the thrust is inside Earth's gravitational field, and that means the water thrown out finds its way back to the oceans. Hilder doesn't figure that in. When he says a million tons of water is used up per flight, he's a liar. It's less than a hundred thousand tons.

"Suppose, now, we have fifty thousand flights a year. We don't, of course; not even fifteen hundred. But let's say there are fifty thousand. I figure there's going to be considerable expansion as time goes on. With fifty thousand flights, one cubic mile of water would be lost to space each year. That means that in a million years, Earth would lose *one quarter of 1 per cent* of its total water supply!"

Digby spread his hands, palms upward, and let them drop. "Commissioner, Interplanetary Alloys has used figures like that in their campaign against Hilder, but you can't fight a tremendous, emotion-filled drive with cold mathematics. This man Hilder has invented a name, 'Wasters.' Slowly he has built this name up into a gigantic conspiracy; a gang of brutal, profit-seeking wretches raping Earth for their own immediate benefit.

"He has accused the government of being riddled with them, the Assembly of being dominated by them, the press of being owned by them. None of this, unfortunately, seems ridiculous to the average man. He knows all too well what selfish men can do to Earth's resources. He knows what happened to Earth's oil during the Time of Troubles, for instance, and the way topsoil was ruined.

"When a farmer experiences a drought, he doesn't care that the amount of water lost in space flight isn't a droplet in a fog as far as Earth's over-all water supply is concerned. Hilder has given him something to blame and that's the

strongest possible consolation for disaster. He isn't going to give that up for a diet of figures."

Sankov said, "That's where I get puzzled. Maybe it's because I don't know how things work on Earth, but it seems to me that there aren't just droughty farmers there. As near as I could make out from the news summaries, these Hilder people are a minority. Why is it Earth goes along with a few farmers and some crackpots that egg them on?"

"Because, Commissioner, there are such things as worried human beings. The steel industry sees that an era of space flight will stress increasingly the light, nonferrous alloys. The various miners' unions worry about extraterrestrial competition. Any Earthman who can't get aluminum to build a prefab is certain that it is because the aluminum is going to Mars. I know a professor of archaeology who's an anti-Waster because he can't get a government grant to cover his excavations. He's convinced that all government money is going into rocketry research and space medicine and he resents it."

Sankov said, "That doesn't sound like Earth people are much different from us here on Mars. But what about the General Assembly? Why do they have to go along with Hilder?"

Digby smiled sourly. "Politics isn't pleasant to explain. Hilder introduced this bill to set up a committee to investigate waste in space flight. Maybe three fourths or more of the General Assembly was against such an investigation as an intolerable and useless extension of bureaucracy—which it is. But then how could any legislator be against a mere investigation of waste? It would sound as though he had something to fear or to conceal. It would sound as though he were himself profiting from waste. Hilder is not in the least afraid of making such accusations, and whether true or not, they would be a powerful factor with the voters in the next election. The bill passed.

"And then there came the question of appointing the members of the committee. Those who were against Hilder

shied away from membership, which would have meant decisions that would be continually embarrassing. Remaining on the side lines would make that one that much less a target for Hilder. The result is that I am the only member of the committee who is outspokenly anti-Hilder and it may cost me re-election."

Sankov said, "I'd be sorry to hear that, Assemblyman. It looks as though Mars didn't have as many friends as we thought we had. We wouldn't like to lose one. But if Hilder wins out, what's he after, anyway?"

"I should think," said Digby, "that that is obvious. He wants to be the next Global Co-ordinator."

"Think he'll make it?"

"If nothing happens to stop him, he will."

"And then what? Will he drop this Waster campaign then?"

"I can't say. I don't know if he's laid his plans past the Co-ordinacy. Still, if you want my guess, he couldn't abandon the campaign and maintain his popularity. It's gotten out of hand."

Sankov scratched the side of his neck. "All right. In that case, I'll ask you for some advice. What can we folks do? You know Earth. You know the situation. We don't. Tell us what to do."

Digby rose and stepped to the window. He looked out upon the low domes of other buildings; red, rocky, completely desolate plain in between; a purple sky and a shrunken sun.

He said, without turning, "Do you people really like it on Mars?"

Sankov smiled. "Most of us don't exactly know any other world, Assemblyman. Seems to me Earth would be something queer and uncomfortable to them."

"But wouldn't Martians get used to it? Earth isn't hard to take after this. Wouldn't your people learn to enjoy the privilege of breathing air under an open sky? You once lived on Earth. You remember what it was like."

"I sort of remember. Still, it doesn't seem to be easy to explain. Earth is just there. It fits people and people fit it. People take Earth the way they find it. Mars is different. It's sort of raw and doesn't fit people. People got to make something out of it. They got to *build* a world, and not take what they find. Mars isn't much yet, but we're building, and when we're finished, we're going to have just what we like. It's sort of a great feeling to know you're building a world. Earth would be kind of unexciting after that."

The Assemblyman said, "Surely the ordinary Martian isn't such a philosopher that he's content to live this terribly hard life for the sake of a future that must be hundreds of generations away."

"No-o, not just like that." Sankov put his right ankle on his left knee and cradled it as he spoke. "Like I said, Martians are a lot like Earthmen, which means, they're sort of human beings, and human beings don't go in for philosophy much. Just the same, there's something to living in a growing world, whether you think about it much or not.

"My father used to send me letters when I first came to Mars. He was an accountant and he just sort of stayed an accountant. Earth wasn't much different when he died from what it was when he was born. He didn't see anything happen. Every day was like every other day, and living was just a way of passing time until he died.

"On Mars, it's different. Every day there's something new—the city's bigger, the ventilation system gets another kick, the water lines from the poles get slicked up. Right now, we're planning to set up a news-film association of our own. We're going to call it Mars Press. If you haven't lived when things are growing all about you, you'll never understand how wonderful it feels.

"No, Assemblyman, Mars is hard and tough and Earth is a lot more comfortable, but seems to me if you take our boys to Earth, they'll be unhappy. They probably wouldn't be able to figure out why, most of them, but they'd feel lost;

lost and useless. Seems to me lots of them would never make the adjustment."

Digby turned away from the window and the smooth, pink skin of his forehead was creased into a frown. "In that case, Commissioner, I am sorry for you. For all of you."

"Why?"

"Because I don't think there's anything your people on Mars can do. Or the people on the Moon or Venus. It won't happen now; maybe it won't happen for a year or two, or even for five years. But pretty soon you'll all have to come back to Earth, unless—"

Sankov's white eyebrows bent low over his eyes. "Well?"

"Unless you can find another source of water besides the planet Earth."

Sankov shook his head. "Don't seem likely, does it?"

"Not very."

"And except for that, seems to you there's no chance?"

"Not at all."

Digby said that and left, and Sankov stared for a long time at nothing before he punched a combination of the local communiline.

After a while, Ted Long looked out at him.

Sankov said, "You were right, son. There's nothing they can do. Even the ones that mean well see no way out. How did you know?"

"Commissioner," said Long, "when you've read all you can about the Time of Troubles, particularly about the twentieth century, nothing political can come as a real surprise."

"Well, maybe. Anyway, son, Assemblyman Digby is sorry for us, quite a piece sorry, you might say, but that's all. He says we'll have to leave Mars—or else get water somewhere else. Only he thinks that we can't get water somewhere else."

"You know we can, don't you, Commissioner?"

"I know we *might*, son. It's a terrible risk."

"If I find enough volunteers, the risk is our business."

"How is it going?"

"Not bad. Some of the boys are on my side right now. I talked Mario Rioz into it, for instance, and you know he's one of the best."

"That's just it—the volunteers will be the best men we have. I hate to allow it."

"If we get back, it will be worth it."

"If! If's a big word, son."

"And a big thing we're trying to do."

"Well, I gave my word that if there was no help on Earth, I'll see that the Phobos water hole lets you have all the water you'll need. Good luck."

6

Half a million miles above Saturn, Mario Rioz was cradled on nothing and sleep was delicious. He came out of it slowly and for a while, alone in his suit, he counted the stars and traced lines from one to another.

At first, as the weeks flew past, it was scavenging all over again, except for the gnawing feeling that every minute meant an additional number of thousands of miles away from all humanity. That made it worse.

They had aimed high to pass out of the ecliptic while moving through the Asteroid Belt. That had used up water and had probably been unnecessary. Although tens of thousands of worldlets look as thick as vermin in two-dimensional projection upon a photographic plate, they are nevertheless scattered so thinly through the quadrillions of cubic miles that make up their conglomerate orbit that only the most ridiculous of coincidence would have brought about a collision.

Still, they passed over the Belt and someone calculated the chances of collision with a fragment of matter large enough to do damage. The value was so low, so impossibly

low, that it was perhaps inevitable that the notion of the "space-float" should occur to someone.

The days were long and many, space was empty, only one man was needed at the controls at any one time. The thought was a natural.

First, it was a particularly daring one who ventured out for fifteen minutes or so. Then another who tried half an hour. Eventually, before the asteroids were entirely behind, each ship regularly had its off-watch member suspended in space at the end of a cable.

It was easy enough. The cable, one of those intended for operations at the conclusion of their journey, was magnetically attached at both ends, one to the space suit to start with. Then you clambered out the lock onto the ship's hull and attached the other end there. You paused awhile, clinging to the metal skin by the electromagnets in your boots. Then you neutralized those and made the slightest muscular effort.

Slowly, ever so slowly, you lifted from the ship and even more slowly the ship's larger mass moved an equivalently shorter distance downward. You floated incredibly, weightlessly, in solid, speckled black. When the ship had moved far enough away from you, your gauntleted hand, which kept touch upon the cable, tightened its grip slightly. Too tightly, and you would begin moving back toward the ship and it toward you. Just tightly enough, and friction would halt you. Because your motion was equivalent to that of the ship, it seemed as motionless below you as though it had been painted against an impossible background while the cable between you hung in coils that had no reason to straighten out.

It was a half-ship to your eye. One half was lit by the light of the feeble Sun, which was still too bright to look at directly without the heavy protection of the polarized space-suit visor. The other half was black on black, invisible.

Space closed in and it was like sleep. Your suit was

warm, it renewed its air automatically, it had food and drink in special containers from which it could be sucked with a minimal motion of the head, it took care of wastes appropriately. Most of all, more than anything else, there was the delightful euphoria of weightlessness.

You never felt so well in your life. The days stopped being too long, they weren't long enough, and there weren't enough of them.

They had passed Jupiter's orbit at a spot some 30 degrees from its then position. For months, it was the brightest object in the sky, always excepting the glowing white pea that was the Sun. At its brightest, some of the Scavengers insisted they could make out Jupiter as a tiny sphere, one side squashed out of true by the night shadow.

Then over a period of additional months it faded, while another dot of light grew until it was brighter than Jupiter. It was Saturn, first as a dot of brilliance, then as an oval, glowing splotch.

("Why oval?" someone asked, and after a while, someone else said, "The rings, of course," and it was obvious.)

Everyone space-floated at all possible times toward the end, watching Saturn incessantly.

("Hey, you jerk, come on back in, damn it. You're on duty." "Who's on duty? I've got fifteen minutes more by my watch." "You set your watch back. Besides, I gave you twenty minutes yesterday." "You wouldn't give two minutes to your grandmother." "Come on in, damn it, or I'm coming out anyway." "All right, I'm coming. Holy howlers, what a racket over a lousy minute." But no quarrel could possibly be serious, not in space. It felt too good.)

Saturn grew until at last it rivaled and then surpassed the Sun. The rings, set at a broad angle to their trajectory of approach, swept grandly about the planet, only a small portion being eclipsed. Then, as they approached, the span of the rings grew still wider, yet narrower as the angle of approach constantly decreased.

The large moons showed up in the surrounding sky like serene fireflies.

Mario Rioz was glad he was awake so that he could watch again.

Saturn filled half the sky, streaked with orange, the night shadow cutting it fuzzily nearly one quarter of the way in from the right. Two round little dots in the brightness were shadows of two of the moons. To the left and behind them (he could look over his left shoulder to see, and as he did so, the rest of his body inched slightly to the right to conserve angular momentum) was the white diamond of the Sun.

Most of all he liked to watch the rings. At the left, they emerged from behind Saturn, a tight, bright triple band of orange light. At the right, their beginnings were hidden in the night shadow, but showed up closer and broader. They widened as they came, just like the flare of a horn, growing hazier as they approached, until, while the eye followed them, they seemed to fill the sky and lose themselves.

From the position of the Scavenger fleet just inside the outer rim of the outermost ring, the rings broke up and assumed their true identity as a phenomenal cluster of solid fragments rather than the tight, solid band of light they seemed.

Below him, or rather in the direction his feet pointed, some twenty miles away, was one of the ring fragments. It looked like a large, irregular splotch, marring the symmetry of space, three quarters in brightness and the night shadow cutting it like a knife. Other fragments were farther off, sparkling like star dust, dimmer and thicker, until, as you followed them down, they became rings once more.

The fragments were motionless, but that was only because the ships had taken up an orbit about Saturn equivalent to that of the outer edge of the rings.

The day before, Rioz reflected, he had been on that nearest fragment, working along with more than a score of others to mold it into the desired shape. Tomorrow he would be at it again.

Today—today he was space-floating.

"Mario?" The voice that broke upon his earphones was questioning.

Momentarily Rioz was flooded with annoyance. Damn it, he wasn't in the mood for company.

"Speaking," he said.

"I thought I had your ship spotted. How are you?"

"Fine. That you, Ted?"

"That's right," said Long.

"Anything wrong on the fragment?"

"Nothing. I'm out here floating."

"You?"

"It gets me, too, occasionally. Beautiful, isn't it?"

"Nice," agreed Rioz.

"You know, I've read Earth books—"

"Grounder books, you mean." Rioz yawned and found it difficult under the circumstances to use the expression with the proper amount of resentment.

"—and sometimes I read descriptions of people lying on grass," continued Long. "You know that green stuff like thin, long pieces of paper they have all over the ground down there, and they look up at the blue sky with clouds in it. Did you ever see any films of that?"

"Sure. It didn't attract me. It looked cold."

"I suppose it isn't, though. After all, Earth is quite close to the Sun, and they say their atmosphere is thick enough to hold the heat. I must admit that personally I would hate to be caught under open sky with nothing on but clothes. Still, I imagine they like it."

"Grounders are nuts!"

"They talk about the trees, big brown stalks, and the winds, air movements, you know."

"You mean drafts. They can keep that, too."

"It doesn't matter. The point is they describe it beautifully, almost passionately. Many times I've wondered, 'What's it really like? Will I ever feel it or is this something only Earthmen can possibly feel?' I've felt so often that I was missing something vital. Now I know what it must be

like. It's this. Complete peace in the middle of a beauty-drenched universe."

Rioz said, "They wouldn't like it. The Grounders, I mean. They're so used to their own lousy little world they wouldn't appreciate what it's like to float and look down on Saturn." He flipped his body slightly and began swaying back and forth about his center of mass, slowly, soothingly.

Long said, "Yes, I think so too. They're slaves to their planet. Even if they come to Mars, it will only be their children that are free. There'll be starships someday; great, huge things that can carry thousands of people and maintain their self-contained equilibrium for decades, maybe centuries. Mankind will spread through the whole Galaxy. But people will have to live their lives out on shipboard until new methods of interstellar travel are developed, so it will be Martians, not planet-bound Earthmen, who will colonize the Universe. That's inevitable. It's got to be. It's the Martian way."

But Rioz made no answer. He had dropped off to sleep again, rocking and swaying gently, half a million miles above Saturn.

7

The work shift of the ring fragment was the tail of the coin. The weightlessness, peace and privacy of the space-float gave place to something that had neither peace nor privacy. Even the weightlessness, which continued, became more a purgatory than a paradise under the new conditions.

Try to manipulate an ordinarily non-portable heat projector. It could be lifted despite the fact that it was six feet high and wide and almost solid metal, since it weighed only a fraction of an ounce. But its inertia was exactly what it had always been, which meant that if it wasn't moved into position very slowly, it would just keep on going, taking you with it. Then you would have to hike the pseudo-grav field of your suit and come down with a jar.

Keralski had hiked the field a little too high and he came down a little too roughly, with the projector coming down with him at a dangerous angle. His crushed ankle had been the first casualty of the expedition.

Rioz was swearing fluently and nearly continuously. He continued to have the impulse to drag the back of his hand across his forehead in order to wipe away the accumulating sweat. The few times that he had succumbed to the impulse, metal had met silicone with a clash that rang loudly inside his suit, but served no useful purpose. The desiccators within the suit were sucking at maximum and, of course, recovering the water and restoring ion-exchanged liquid, containing a careful proportion of salt, into the appropriate receptacle.

Rioz yelled, "Damn it, Dick, wait till I give the word, will you?"

And Swenson's voice rang in his ears, "Well, how long am I supposed to sit here?"

"Till I say," replied Rioz.

He strengthened pseudo-grav and lifted the projector a bit. He released pseudo-grav, insuring that the projector would stay in place for minutes even if he withdrew support altogether. He kicked the cable out of the way (it stretched beyond the close "horizon" to a power source that was out of sight) and touched the release.

The material of which the fragment was composed bubbled and vanished under its touch. A section of the lip of the tremendous cavity he had already carved into its substance melted away and a roughness in its contour had disappeared.

"Try it now," called Rioz.

Swenson was in the ship that was hovering nearly over Rioz's head.

Swenson called, "All clear?"

"I told you to go ahead."

It was a feeble flicker of steam that issued from one of the ship's forward vents. The ship drifted down toward the ring

fragment. Another flicker adjusted a tendency to drift sidewise. It came down straight.

A third flicker to the rear slowed it to a feather rate.

Rioz watched tensely. "Keep her coming. You'll make it. You'll make it."

The rear of the ship entered the hole, nearly filling it. The bellying walls came closer and closer to its rim. There was a grinding vibration as the ship's motion halted.

It was Swenson's turn to curse. "It doesn't fit," he said.

Rioz threw the projector groundward in a passion and went flailing up into space. The projector kicked up a white crystalline dust all about it, and when Rioz came down under pseudo-grav, he did the same.

He said, "You went in on the bias, you dumb Grounder."

"I hit it level, you dirt-eating farmer."

Backward-pointing side jets of the ship were blasting more strongly than before, and Rioz hopped to get out of the way.

The ship scraped up from the pit, then shot into space half a mile before forward jets could bring it to a halt.

Swenson said tensely, "We'll spring half a dozen plates if we do this once again. Get it right, will you?"

"I'll get it right. Don't worry about it. Just you come in right."

Rioz jumped upward and allowed himself to climb three hundred yards to get an over-all look at the cavity. The gouge marks of the ship were plain enough. They were concentrated at one point halfway down the pit. He would get that.

It began to melt outward under the blaze of the projector.

Half an hour later the ship snuggled neatly into its cavity, and Swenson, wearing his space suit, emerged to join Rioz.

Swenson said, "If you want to step in and climb out of the suit, I'll take care of the icing."

"It's all right," said Rioz. "I'd just as soon sit here and watch Saturn."

He sat down at the lip of the pit. There was a six-foot gap

between it and the ship. In some places about the circle, it was two feet; in a few places, even merely a matter of inches. You couldn't expect a better fit out of handwork. The final adjustment would be made by steaming ice gently and letting it freeze into the cavity between the lip and the ship.

Saturn moved visibly across the sky, its vast bulk inching below the horizon.

Rioz said, "How many ships are left to put in place?"

Swenson said, "Last I heard, it was eleven. We're in now, so that leaves only ten. Seven of the ones that are placed are iced in. Two or three are dismantled."

"We're coming along fine."

"There's plenty to do yet. Don't forget the main jets at the other end. And the cables and the power lines. Sometimes I wonder if we'll make it. On the way out, it didn't bother me so much, but just now I was sitting at the controls and I was saying, 'We won't make it. We'll sit out here and starve and die with nothing but Saturn over us.' It makes me feel—"

He didn't explain how it made him feel. He just sat there.

Rioz said, "You think too damn much."

"It's different with you," said Swenson. "I keep thinking of Pete—and Dora."

"What for? She said you could go, didn't she? The Commissioner gave her that talk on patriotism and how you'd be a hero and set for life once you got back, and she said you could go. You didn't sneak out the way Adams did."

"Adams is different. That wife of his should have been shot when she was born. Some women can make hell for a guy, can't they? She didn't want him to go—but she'd probably rather he didn't come back if she can get his settlement pay."

"What's your kick, then? Dora wants you back, doesn't she?"

Swenson sighed. "I never treated her right."

"You turned over your pay, it seems to me. I wouldn't do

that for any woman. Money for value received, not a cent more."

"Money isn't it. I get to thinking out here. A woman likes company. A kid needs his father. What am I doing way out here?"

"Getting set to go home."

"Ah-h, you don't understand."

8

Ted Long wandered over the ridged surface of the ring fragment with his spirits as icy as the ground he walked on. It had all seemed perfectly logical back on Mars, but that was Mars. He had worked it out carefully in his mind in perfectly reasonable steps. He could still remember exactly how it went.

It didn't take a ton of water to move a ton of ship. It was not mass equals mass, but mass times velocity equals mass times velocity. It didn't matter, in other words, whether you shot out a ton of water at a mile a second or a hundred pounds of water at twenty miles a second. You got the same final velocity out of the ship.

That meant the jet nozzles had to be made narrower and the steam hotter. But then drawbacks appeared. The narrower the nozzle, the more energy was lost in friction and turbulence. The hotter the steam, the more refractory the nozzle had to be and the shorter its life. The limit in that direction was quickly reached.

Then, since a given weight of water could move considerably more than its own weight under the narrow-nozzle conditions, it paid to be big. The bigger the water-storage space, the larger the size of the actual travel-head, even in proportion. So they started to make liners heavier and bigger. But then the larger the shell, the heavier the bracings, the more difficult the weldings, the more exacting the engineering requirements. At the moment, the limit in that direction had been reached also.

And then he had put his finger on what had seemed to him to be the basic flaw—the original unswervable conception that the fuel had to be placed *inside* the ship; the metal had to be built to encircle a million tons of water.

Why? Water did not have to be water. It could be ice, and ice could be shaped. Holes could be melted into it. Travel-heads and jets could be fitted into it. Cables could hold travel-heads and jets stiffly together under the influence of magnetic field-force grips.

Long felt the trembling of the ground he walked on. He was at the head of the fragment. A dozen ships were blasting in and out of sheaths carved in its substance, and the fragment shuddered under the continuing impact.

The ice didn't have to be quarried. It existed in proper chunks in the rings of Saturn. That's all the rings were—pieces of nearly pure ice, circling Saturn. So spectroscopy stated and so it had turned out to be. He was standing on one such piece now, over two miles long, nearly one mile thick. It was almost half a billion tons of water, all in one piece, and he was standing on it.

But now he was face to face with the realities of life. He had never told the men just how quickly he had expected to set up the fragment as a ship, but in his heart, he had imagined it would be two days. It was a week now and he didn't dare to estimate the remaining time. He no longer even had any confidence that the task was a possible one. Would they be able to control jets with enough delicacy through leads slung across two miles of ice to manipulate out of Saturn's dragging gravity?

Drinking water was low, though they could always distill more out of the ice. Still, the food stores were not in a good way either.

He paused, looking up into the sky, eyes straining. *Was* the object growing larger? He ought to measure its distance. Actually, he lacked the spirit to add that trouble to the others. His mind slid back to greater immediacies.

Morale, at least, was high. The men seemed to enjoy being out Saturn-way. They were the first humans to penetrate this far, the first to pass the asteroids, the first to see Jupiter like a glowing pebble to the naked eye, the first to see Saturn—like that.

He didn't think fifty practical, case-hardened, shell-snatching Scavengers would take time to feel that sort of emotion. But they did. And they were proud.

Two men and a half-buried ship slid up the moving horizon as he walked.

He called crisply, "Hello, there!"

Rioz answered, "That you, Ted?"

"You bet. Is that Dick with you?"

"Sure. Come on, sit down. We were just getting ready to ice in and we were looking for an excuse to delay."

"I'm not," said Swenson promptly. "When will we be leaving, Ted?"

"As soon as we get through. That's no answer, is it?"

Swenson said dispiritedly, "I suppose there isn't any other answer."

Long looked up, staring at the irregular bright splotch in the sky.

Rioz followed his glance. "What's the matter?"

For a moment, Long did not reply. The sky was black otherwise and the ring fragments were an orange dust against it. Saturn was more than three fourths below the horizon and the rings were going with it. Half a mile away a ship bounded past the icy rim of the planetoid into the sky, was orange-lit by Saturn-light, and sank down again.

The ground trembled gently.

Rioz said, "Something bothering you about the Shadow?"

They called it that. It was the nearest fragment of the rings, quite close considering that they were at the outer rim of the rings, where the pieces spread themselves relatively thin. It was perhaps twenty miles off, a jagged mountain, its shape clearly visible.

"How does it look to you?" asked Long.

Rioz shrugged. "Okay, I guess. I don't see anything wrong."

"Doesn't it seem to be getting larger?"

"Why should it?"

"Well, doesn't it?" Long insisted.

Rioz and Swenson stared at it thoughtfully.

"It does look bigger," said Swenson.

"You're just putting the notion into our minds," Rioz argued. "If it were getting bigger, it would be coming closer."

"What's impossible about that?"

"These things are on stable orbits."

"They were when we came here," said Long. "There, did you feel that?"

The ground had trembled again.

Long said, "We've been blasting this thing for a week now. First, twenty-five ships landed on it, which changed its momentum right there. Not much, of course. Then we've been melting parts of it away and our ships have been blasting in and out of it—all at one end, too. In a week, we may have changed its orbit just a bit. The two fragments, this one and the Shadow, might be converging."

"It's got plenty of room to miss us in." Rioz watched it thoughtfully. "Besides, if we can't even tell for sure that it's getting bigger, how quickly can it be moving? Relative to us, I mean."

"It doesn't have to be moving quickly. Its momentum is as large as ours, so that, however gently it hits, we'll be nudged completely out of our orbit, maybe toward Saturn, where we don't want to go. As a matter of fact, ice has a very low tensile strength, so that both planetoids might break up into gravel."

Swenson rose to his feet. "Damn it, if I can tell how a shell is moving a thousand miles away, I can tell what a mountain is doing twenty miles away." He turned toward the ship.

Long didn't stop him.

Rioz said, "There's a nervous guy."

The neighboring planetoid rose to zenith, passed overhead, began sinking. Twenty minutes later, the horizon opposite that portion behind which Saturn had disappeared burst into orange flame as its bulk began lifting again.

Rioz called into his radio, "Hey, Dick, are you dead in there?"

"I'm checking," came the muffled response.

"Is it moving?" asked Long.

"Yes."

"Toward us?"

There was a pause. Swenson's voice was a sick one. "On the nose, Ted. Intersection of orbits will take place in three days."

"You're crazy!" yelled Rioz.

"I checked four times," said Swenson.

Long thought blankly, What do we do now?

9

Some of the men were having trouble with the cables. They had to be laid precisely; their geometry had to be very nearly perfect for the magnetic field to attain maximum strength. In space, or even in air, it wouldn't have mattered. The cables would have lined up automatically once the juice went on.

Here it was different. A gouge had to be plowed along the planetoid's surface and into it the cable had to be laid. If it were not lined up within a few minutes of arc of the calculated direction, a torque would be applied to the entire planetoid, with consequent loss of energy, none of which could be spared. The gouges then had to be redriven, the cables shifted and iced into the new positions.

The men plodded wearily through the routine.

And then the word reached them:

"All hands to the jets!"

Scavengers could not be said to be the type that took kindly to discipline. It was a grumbling, growling, muttering group that set about disassembling the jets of the ships that yet remained intact, carrying them to the tail end of the planetoid, grubbing them into position, and stringing the leads along the surface.

It was almost twenty-four hours before one of them looked into the sky and said, "Holy jeepers!" followed by something less printable.

His neighbor looked and said, "I'll be damned!"

Once they noticed, all did. It became the most astonishing fact in the Universe.

"Look at the Shadow!"

It was spreading across the sky like an infected wound. Men looked at it, found it had doubled its size, wondered why they hadn't noticed that sooner.

Work came to a virtual halt. They besieged Ted Long.

He said, "We can't leave. We don't have the fuel to see us back to Mars and we don't have the equipment to capture another planetoid. So we've got to stay. Now the Shadow is creeping in on us because our blasting has thrown us out of orbit. We've got to change that by continuing the blasting. Since we can't blast the front end any more without endangering the ship we're building, let's try another way."

They went back to work on the jets with a furious energy that received impetus every half hour when the Shadow rose again over the horizon, bigger and more menacing than before.

Long had no assurance that it would work. Even if the jets would respond to the distant controls, even if the supply of water, which depended upon a storage chamber opening directly into the icy body of the planetoid, with built-in heat projectors steaming the propulsive fluid directly into the driving cells, were adequate, there was still no certainty that the body of the planetoid without a magnetic cable sheathing would hold together under the enormously disruptive stresses.

"Ready!" came the signal in Long's receiver.

Long called, "Ready!" and depressed the contact.

The vibration grew about him. The star field in the visiplate trembled.

In the rearview, there was a distant gleaming spume of swiftly moving ice crystals.

"It's blowing!" was the cry.

It kept on blowing. Long dared not stop. For six hours, it blew, hissing, bubbling, steaming into space; the body of the planetoid converted to vapor and hurled away.

The Shadow came closer until men did nothing but stare at the mountain in the sky, surpassing Saturn itself in spectacularity. Its every groove and valley was a plain scar upon its face. But when it passed through the planetoid's orbit, it crossed more than half a mile behind its then position.

The steam jet ceased.

Long bent in his seat and covered his eyes. He hadn't eaten in two days. He could eat now, though. Not another planetoid was close enough to interrupt them, even if it began an approach that very moment.

Back on the planetoid's surface, Swenson said, "All the time I watched that damned rock coming down, I kept saying to myself, 'This can't happen. We can't let it happen.' "

"Hell," said Rioz, "we were all nervous. Did you see Jim Davis? He was green. I was a little jumpy myself."

"That's not it. It wasn't just—dying, you know. I was thinking—I know its funny, but I can't help it—I was thinking that Dora warned me I'd get myself killed, she'll never let me hear the last of it. Isn't that a crummy sort of attitude at a time like that?"

"Listen," said Rioz, "you wanted to get married, so you got married. Why come to me with your troubles?"

10

The flotilla, welded into a single unit, was returning over its mighty course from Saturn to Mars. Each day it flashed over a length of space it had taken nine days outward.

Ted Long had put the entire crew on emergency. With twenty-five ships embedded in the planetoid taken out of Saturn's wings and unable to move or maneuver independently, the co-ordination of their power sources into unified blasts was a ticklish problem. The jarring that took place on the first day of travel nearly shook them out from under their hair.

That, at least, smoothed itself out as the velocity raced upward under the steady thrust from behind. They passed the one-hundred-thousand-mile-an-hour mark late on the second day, and climbed steadily toward the million-mile mark and beyond.

Long's ship, which formed the needle point of the frozen fleet, was the only one which possessed a five-way view of space. It was an uncomfortable position under the circumstances. Long found himself watching tensely, imagining somehow that the stars would slowly begin to slip backward, to whizz past them, under the influence of the multi-ship's tremendous rate of travel.

They didn't, of course. They remained nailed to the black backdrop, their distance scorning with patient immobility any speed mere man could achieve.

The men complained bitterly after the first few days. It was not only that they were deprived of the space-float. They were burdened by much more than the ordinary pseudo-gravity field of the ships, by the effects of the fierce acceleration under which they were living. Long himself was weary to death of the relentless pressure against hydraulic cushions.

They took to shutting off the jet thrusts one hour out of every four and Long fretted.

It had been just over a year that he had last seen Mars shrinking in an observation window from this ship, which had then been an independent entity. What had happened since then? Was the colony still there?

In something like a growing panic, Long sent out radio pulses toward Mars daily, with the combined power of twenty-five ships behind it. There was no answer. He expected none. Mars and Saturn were on opposite sides of the Sun now, and until he mounted high enough above the ecliptic to get the Sun well beyond the line connecting himself and Mars, solar interference would prevent any signal from getting through.

High above the outer rim of the Asteroid Belt, they reached maximum velocity. With short spurts of power from first one side jet, then another, the huge vessel reversed itself. The composite jet in the rear began its mighty roaring once again, but now the result was deceleration.

They passed a hundred million miles over the Sun, curving down to intersect the orbit of Mars.

A week out of Mars, answering signals were heard for the first time, fragmentary, ether-torn, and incomprehensible, but they were coming from Mars. Earth and Venus were at angles sufficiently different to leave no doubt of that.

Long relaxed. There were still humans on Mars, at any rate.

Two days out of Mars, the signal was strong and clear and Sankov was at the other end.

Sankov said, "Hello, son. It's three in the morning here. Seems like people have no consideration for an old man. Dragged me right out of bed."

"I'm sorry, sir."

"Don't be. They were following orders. I'm afraid to ask, son. Anyone hurt? Maybe dead?"

"No deaths, sir. Not one."

"And—and the water? Any left?"

Long said, with an effort at nonchalance, "Enough."

"In that case, get home as fast as you can. Don't take any chances, of course."

"There's trouble, then."

"Fair to middling. When will you come down?"

"Two days. Can you hold out that long?"

"I'll hold out."

Forty hours later Mars had grown to a ruddy-orange ball that filled the ports and they were in the final planet-landing spiral.

"Slowly," Long said to himself, "slowly." Under these conditions, even the thin atmosphere of Mars could do dreadful damage if they moved through it too quickly.

Since they came in from well above the ecliptic, their spiral passed from north to south. A polar cap shot whitely below them, then the much smaller one of the summer hemisphere, the larger one again, the small one, at longer and longer intervals. The planet approached closer, the landscape began to show features.

"Prepare for landing!" called Long.

11

Sankov did his best to look placid, which was difficult considering how closely the boys had shaved their return. But it had worked out well enough.

Until a few days ago, he had no sure knowledge that they had survived. It seemed more likely—inevitable, almost—that they were nothing but frozen corpses somewhere in the trackless stretches from Mars to Saturn, new planetoids that had once been alive.

The Committee had been dickering with him for weeks before the news had come. They had insisted on his signature to the paper for the sake of appearances. It would look like an agreement, voluntarily and mutually arrived at. But Sankov knew well that, given complete obstinacy on his part, they would act unilaterally and be damned with appearances. It seemed fairly certain that Hilder's election

was secure now and they would take the chance of arousing a reaction of sympathy for Mars.

So he dragged out the negotiations, dangling before them always the possibility of surrender.

And then he heard from Long and concluded the deal quickly.

The papers had lain before him and he had made a last statement for the benefit of the reporters who were present.

He said, "Total imports of water from Earth are twenty million tons a year. This is declining as we develop our own piping system. If I sign this paper agreeing to an embargo, our industry will be paralyzed, any possibilities of expansion will halt. It looks to me as if that can't be what's in Earth's mind, can it?"

Their eyes met his and held only a hard glitter. Assemblyman Digby had already been replaced and they were unanimous against him.

The Committee Chairman impatiently pointed out, "You have said all this before."

"I know, but right now I'm kind of getting ready to sign and I want it clear in my head. Is Earth set and determined to bring us to an end here?"

"Of course not. Earth is interested in conserving its irreplaceable water supply, nothing else."

"You have one and half quintillion tons of water on Earth."

The Committee Chairman said, "We cannot spare water." And Sankov had signed.

That had been the final note he wanted. Earth had one and a half quintillion tons of water and could spare none of it.

Now, a day and a half later, the Committee and the reporters waited in the space-port dome. Through thick, curving windows, they could see the bare and empty grounds of Mars Spaceport.

The Committee Chairman asked with annoyance, "How

much longer do we have to wait? And, if you don't mind, what are we waiting for?"

Sankov said, "Some of our boys have been out in space, out past the asteroids."

The Committee Chairman removed a pair of spectacles and cleaned them with a snowy-white handkerchief. "And they're returning?"

"They are."

The Chairman shrugged, lifted his eyebrows in the direction of the reporters.

In the smaller room adjoining, a knot of women and children clustered about another window. Sankov stepped back a bit to cast a glance toward them. He would much rather have been with them, been part of their excitement and tension. He, like them, had waited over a year now. He, like them, had thought, over and over again, that the men must be dead.

"You see that?" said Sankov, pointing.

"Hey!" cried a reporter. "It's a ship!"

A confused shouting came from the adjoining room.

It wasn't a ship so much as a bright dot obscured by a drifting white cloud. The cloud grew larger and began to have form. It was a double streak against the sky, the lower ends billowing out and upward again. As it dropped still closer, the bright dot at the upper end took on a crudely cylindrical form.

It was rough and craggy, but where the sunlight hit, brilliant high lights bounced back.

The cylinder dropped toward the ground with the ponderous slowness characteristic of space vessels. It hung suspended on those blasting jets and settled down upon the recoil of tons of matter hurling downward like a tired man dropping into his easy chair.

And as it did so, a silence fell upon all within the dome. The women and children in one room, the politicians and reporters in the other remained frozen, heads craned incredulously upward.

The cylinder's landing flanges, extending far below the two rear jets, touched ground and sank into the pebbly morass. And then the ship was motionless and the jet action ceased.

But the silence continued in the dome. It continued for a long time.

Men came clambering down the sides of the immense vessel, inching down, down the two-mile trek to the ground, with spikes on their shoes and ice axes in their hands. They were gnats against the blinding surface.

One of the reporters croaked, "What is it?"

"That," said Sankov calmly, "happens to be a chunk of matter that spent its time scooting around Saturn as part of its rings. Our boys fitted it out with travel-head and jets and ferried it home. It just turns out the fragments in Saturn's rings are made up out of ice."

He spoke into a continuing deathlike silence. "That thing that looks like a spaceship is just a mountain of hard water. If it were standing like that on Earth, it would be melting into a puddle and maybe it would break under its own weight. Mars is colder and has less gravity, so there's no such danger.

"Of course, once we get this thing really organized, we can have water stations on the moons of Saturn and Jupiter and on the asteroids. We can scale in chunks of Saturn's rings and pick them up and send them on at the various stations. Our Scavengers are good at that sort of thing.

"We'll have all the water we need. That one chunk you see is just under a cubic mile—or about what Earth would send us in two hundred years. The boys used quite a bit of it coming back from Saturn. They made it in five weeks, they tell me, and used up about a hundred million tons. But, Lord, that didn't make any dent at all in that mountain. Are you getting all this, boys?"

He turned to the reporters. There was no doubt they were getting it.

He said, "Then get this, too. Earth is worried about its

water supply. It only has one and a half quintillion tons. It can't spare us a single ton of it. Write down that we folks on Mars are worried about Earth and don't want anything to happen to Earth people. Write down that we'll sell water to Earth. Write down that we'll let them have million-ton lots for a reasonable fee. Write down that in ten years, we figure we can sell it in cubic-mile lots. Write down that Earth can quit worrying because Mars can sell it all the water it needs and wants."

The Committee Chairman was past hearing. He was feeling the future rushing in. Dimly he could see the reporters grinning as they wrote furiously.

Grinning.

He could hear the grin become laughter on Earth as Mars turned the tables so neatly on the anti-Wasters. He could hear the laughter thunder from every continent when word of the fiasco spread. And he could see the abyss, deep and black as space, into which would drop forever the political hopes of John Hilder and of every opponent of space flight left on Earth—his own included, of course.

In the adjoining room, Dora Swenson screamed with joy, and Peter, grown two inches, jumped up and down, calling, "Daddy! Daddy!"

Richard Swenson had just stepped off the extremity of the flange and, face showing clearly through the clear silicone of the headpiece, marched toward the dome.

"Did you ever see a guy look so happy?" asked Ted Long. "Maybe there's something in this marriage business."

"Ah, you've just been out in space too long," Rioz said.

SALLY

Sally was coming down the lake road, so I waved to her and called her by name. I always liked to see Sally. I liked all of them, you understand, but Sally's the prettiest one of the lot. There just isn't any question about it.

She moved a little faster when I waved to her. Nothing undignified. She was never that. She moved just enough faster to show that she was glad to see me, too.

I turned to the man standing beside me. "That's Sally," I said.

He smiled at me and nodded.

Mrs. Hester had brought him in. She said, "This is Mr. Gellhorn, Jake. You remember he sent you the letter asking for an appointment."

That was just talk, really. I have a million things to do around the Farm, and one thing I just can't waste my time on is mail. That's why I have Mrs. Hester around. She lives pretty close by, she's good at attending to foolishness without running to me about it, and most of all, she likes Sally and the rest. Some people don't.

"Glad to see you, Mr. Gellhorn," I said.

"Raymond J. Gellhorn," he said, and gave me his hand, which I shook and gave back.

He was a largish fellow, half a head taller than I and

wider, too. He was about half my age, thirtyish. He had black hair, plastered down slick, with a part in the middle, and a thin mustache, very neatly trimmed. His jawbones got big under his ears and made him look as if he had a slight case of mumps. On video he'd be a natural to play the villain, so I assumed he was a nice fellow. It goes to show that video can't be wrong all the time.

"I'm Jacob Folkers," I said. "What can I do for you?"

He grinned. It was a big, wide, white-toothed grin. "You can tell me a little about your farm here, if you don't mind."

I heard Sally coming up behind me and I put out my hand. She slid right into it and the feel of the hard, glossy enamel of her fender was warm in my palm.

"A nice automatobile," said Gellhorn.

That's one way of putting it. Sally was a 2045 convertible with a Hennis-Carleton positronic motor and an Armat chassis. She had the cleanest, finest lines I've ever seen on any model, bar none. For five years, she'd been my favorite, and I'd put everything into her I could dream up. In all that time, there'd never been a human being behind her wheel.

Not once.

"Sally," I said, patting her gently, "meet Mr. Gellhorn."

Sally's cylinder-purr keyed up a little. I listened carefully for any knocking. Lately, I'd been hearing motor-knock in almost all the cars and changing the gasoline hadn't done a bit of good. Sally was as smooth as her paint job this time, however.

"Do you have names for all your cars?" asked Gellhorn.

He sounded amused, and Mrs. Hester doesn't like people to sound as though they were making fun of the Farm. She said, sharply, "Certainly. The cars have real personalities, don't they, Jake? The sedans are all males and the convertibles are females."

Gellhorn was smiling again. "And do you keep them in separate garages, ma'am?"

Mrs. Hester glared at him.

Gellhorn said to me, "And now I wonder if I can talk to you alone, Mr. Folkers?"

"That depends," I said. "Are you a reporter?"

"No, sir. I'm a sales agent. Any talk we have is not for publication. I assure you I am interested in strict privacy."

"Let's walk down the road a bit. There's a bench we can use."

We started down. Mrs. Hester walked away. Sally nudged along after us.

I said, "You don't mind if Sally comes along, do you?"

"Not at all. She can't repeat what we say, can she?" He laughed at his own joke, reached over and rubbed Sally's grille.

Sally raced her motor and Gellhorn's hand drew away quickly.

"She's not used to strangers," I explained.

We sat down on the bench under the big oak tree where we could look across the small lake to the private speedway. It was the warm part of the day and the cars were out in force, at least thirty of them. Even at this distance I could see that Jeremiah was pulling his usual stunt of sneaking up behind some staid older model, then putting on a jerk of speed and yowling past with deliberately squealing brakes. Two weeks before he had crowded old Angus off the asphalt altogether, and I had turned off his motor for two days.

It didn't help though, I'm afraid, and it looks as though there's nothing to be done about it. Jeremiah is a sports model to begin with and that kind is awfully hot-headed.

"Well, Mr. Gellhorn," I said. "Could you tell me why you want the information?"

But he was just looking around. He said, "This *is* an amazing place, Mr. Folkers."

"I wish you'd call me Jake. Everyone does."

"All right, Jake. How many cars do you have here?"

"Fifty-one. We get one or two new ones every year. One year we got five. We haven't lost one yet. They're all in perfect running order. We even have a '15 model Mat-

O-Mot in working order. One of the original automatics. It was the first car here."

Good old Matthew. He stayed in the garage most of the day now, but he was the granddaddy of all positronic-motored cars. Those were the days when blind war veterans, paraplegics and heads of state were the only ones who drove automatics. But Samson Harridge was my boss and he was rich enough to be able to get one. I was his chauffeur at the time.

The thought makes me feel old. I can remember when there wasn't an automobile in the world with brains enough to find its way home. I chauffeured dead lumps of machines that needed a man's hand at their controls every minute. Every year machines like that used to kill tens of thousands of people.

The automatics fixed that. A positronic brain can react much faster than a human one, of course, and it paid people to keep hands off the controls. You got in, punched your destination and let it go its own way.

We take it for granted now, but I remember when the first laws came out forcing the old machines off the highways and limiting travel to automatics. Lord, what a fuss. They called it everything from communism to fascism, but it emptied the highways and stopped the killing, and still more people get around more easily the new way.

Of course, the automatics were ten to a hundred times as expensive as the hand-driven ones, and there weren't many that could afford a private vehicle. The industry specialized in turning out omnibus-automatics. You could always call a company and have one stop at your door in a matter of minutes and take you where you wanted to go. Usually, you had to drive with others who were going your way, but what's wrong with that?

Samson Harridge had a private car though, and I went to him the minute it arrived. The car wasn't Matthew to me then. I didn't know it was going to be the dean of the Farm

some day. I only knew it was taking my job away and I hated it.

I said, "You won't be needing me any more, Mr. Harridge?"

He said, "What are you dithering about, Jake? You don't think I'll trust myself to a contraption like that, do you? You stay right at the controls."

I said, "But it works by itself, Mr. Harridge. It scans the road, reacts properly to obstacles, humans, and other cars, and remembers routes to travel."

"So they say. So they say. Just the same, you're sitting right behind the wheel in case anything goes wrong."

Funny how you can get to like a car. In no time I was calling it Matthew and was spending all my time keeping it polished and humming. A positronic brain stays in condition best when it's got control of its chassis at all times, which means it's worth keeping the gas tank filled so that the motor can turn over slowly day and night. After a while, it got so I could tell by the sound of the motor how Matthew felt.

In his own way, Harridge grew fond of Matthew, too. He had no one else to like. He'd divorced or outlived three wives and outlived five children and three grandchildren. So when he died, maybe it wasn't surprising that he had his estate converted into a Farm for Retired Automobiles, with me in charge and Matthew the first member of a distinguished line.

It's turned out to be my life. I never got married. You can't get married and still tend to automatics the way you should.

The newspapers thought it was funny, but after a while they stopped joking about it. Some things you can't joke about. Maybe you've never been able to afford an automatic and maybe you never will, either, but take it from me, you get to love them. They're hard-working and affectionate. It takes a man with no heart to mistreat one or to see one mistreated.

It got so that after a man had an automatic for a while, he would make provisions for having it left to the Farm, if he didn't have an heir he could rely on to give it good care.

I explained that to Gellhorn.

He said, "Fifty-one cars! That represents a lot of money."

"Fifty thousand minimum per automatic, original investment," I said. "They're worth a lot more now. I've done things for them."

"It must take a lot of money to keep up the Farm."

"You're right there. The Farm's a non-profit organization, which gives us a break on taxes and, of course, new automatics that come in usually have trust funds attached. Still, costs are always going up. I have to keep the place landscaped; I keep laying down new asphalt and keeping the old in repair; there's gasoline, oil, repairs, and new gadgets. It adds up."

"And you've spent a long time at it."

"I sure have, Mr. Gellhorn. Thirty-three years."

"You don't seem to be getting much out of it yourself."

"I don't? You surprise me, Mr. Gellhorn. I've got Sally and fifty others. Look at her."

I was grinning. I couldn't help it. Sally was so clean, it almost hurt. Some insect must have died on her windshield or one speck of dust too many had landed, so she was going to work. A little tube protruded and spurted Tergosol over the glass. It spread quickly over the silicone surface film and squeegees snapped into place instantly, passing over the windshield and forcing the water into the little channel that led it, dripping, down to the ground. Not a speck of water got onto her glistening apple-green hood. Squeegee and detergent tube snapped back into place and disappeared.

Gellhorn said, "I never saw an automatic do that."

"I guess not," I said. "I fixed that up specially on our cars. They're clean. They're always scrubbing their glass. They like it. I've even got Sally fixed up with wax jets. She polishes herself every night till you can see your face in any

part of her and shave by it. If I can scrape up the money, I'd be putting it on the rest of the girls. Convertibles are very vain."

"I can tell you how to scrape up the money, if that interests you."

"That always does. How?"

"Isn't that obvious, Jake? Any of your cars is worth fifty thousand minimum, you said. I'll bet most of them top six figures."

"So?"

"Ever think of selling a few?"

I shook my head. "You don't realize it, I guess, Mr. Gellhorn, but I can't sell any of these. They belong to the Farm, not to me."

"The money would go to the Farm."

"The incorporation papers of the Farm provide that the cars receive perpetual care. They can't be sold."

"What about the motors, then?"

"I don't understand you."

Gellhorn shifted position and his voice got confidential. "Look here, Jake, let me explain the situation. There's a big market for private automatics if they could only be made cheaply enough. Right?"

"That's no secret."

"And ninety-five per cent of the cost is the motor. Right? Now, I know where we can get a supply of bodies. I also know where we can sell automatics at a good price—twenty or thirty thousand for the cheaper models, maybe fifty or sixty for the better ones. All I need are the motors. You see the solution?"

"I don't, Mr. Gellhorn." I did, but I wanted him to spell it out.

"It's right here. You've got fifty-one of them. You're an expert automatobile mechanic, Jake. You must be. You could unhook a motor and place it in another car so that no one would know the difference."

"It wouldn't be exactly ethical."

"You wouldn't be harming the cars. You'd be doing them a favor. Use your older cars. Use that old Mat-O-Mot."

"Well, now, wait a while, Mr. Gellhorn. The motors and bodies aren't two separate items. They're a single unit. Those motors are used to their own bodies. They wouldn't be happy in another car."

"All right, that's a point. That's a very good point, Jake. It would be like taking your mind and putting it in someone else's skull. Right? You don't think you would like that?"

"I don't think I would. No."

"But what if I took your mind and put it into the body of a young athlete. What about that, Jake? You're not a youngster anymore. If you had the chance, wouldn't you enjoy being twenty again? That's what I'm offering some of your positronic motors. They'll be put into new '57 bodies. The latest construction."

I laughed. "That doesn't make much sense, Mr. Gellhorn. Some of our cars may be old, but they're well-cared for. Nobody drives them. They're allowed their own way. They're *retired*, Mr. Gellhorn. I wouldn't want a twenty-year-old body if it meant I had to dig ditches for the rest of my new life and never have enough to eat . . . What do you think, Sally?"

Sally's two doors opened and then shut with a cushioned slam.

"What's that?" said Gellhorn.

"That's the way Sally laughs."

Gellhorn forced a smile. I guess he thought I was making a bad joke. He said, "Talk sense, Jake. Cars are *made* to be driven. They're probably not happy if you don't drive them."

I said, "Sally hasn't been driven in five years. She looks happy to me."

"I wonder."

He got up and walked toward Sally slowly. "Hi, Sally, how'd you like a drive?"

Sally's motor revved up. She backed away.

"Don't push her, Mr. Gellhorn," I said. "She's liable to be a little skittish."

Two sedans were about a hundred yards up the road. They had stopped. Maybe, in their own way, they were watching. I didn't bother about them. I had my eyes on Sally, and I kept them there.

Gellhorn said, "Steady now, Sally." He lunged out and seized the door handle. It didn't budge, of course.

He said, "It opened a minute ago."

I said, "Automatic lock. She's got a sense of privacy. Sally has."

He let go, then said, slowly and deliberately, "A car with a sense of privacy shouldn't go around with its top down."

He stepped back three or four paces, then quickly, so quickly I couldn't take a step to stop him, he ran forward and vaulted into the car. He caught Sally completely by surprise, because as he came down, he shut off the ignition before she could lock it in place.

For the first time in five years, Sally's motor was dead.

I think I yelled, but Gellhorn had the switch on "Manual" and locked that in place, too. He kicked the motor into action. Sally was alive again but she had no freedom of action.

He started up the road. The sedans were still there. They turned and drifted away, not very quickly. I suppose it was all a puzzle to them.

One was Giuseppe, from the Milan factories, and the other was Stephen. They were always together. They were both new at the Farm, but they'd been here long enough to know that our cars just didn't have drivers.

Gellhorn went straight on, and when the sedans finally got it through their heads that Sally wasn't going to slow down, that she *couldn't* slow down, it was too late for anything but desperate measures.

They broke for it, one to each side, and Sally raced between them like a streak. Steve crashed through the lakeside fence and rolled to a halt on the grass and mud not

six inches from the water's edge. Giuseppe bumped along the land side of the road to a shaken halt.

I had Steve back on the highway and was trying to find out what harm, if any, the fence had done him, when Gellhorn came back.

Gellhorn opened Sally's door and stepped out. Leaning back, he shut off the ignition a second time.

"There," he said. "I think I did her a lot of good."

I held my temper. "Why did you dash through the sedans? There was no reason for that."

"I kept expecting them to turn out."

"They did. One went through a fence."

"I'm sorry, Jake," he said. "I thought they'd move more quickly. You know how it is. I've been in lots of buses, but I've only been in a private automatic two or three times in my life, and this is the first time I ever drove one. That just shows you, Jake. It got me, driving one, and I'm pretty hard-boiled. I tell you, we don't have to go more than twenty per cent below list price to reach a good market, and it would be ninety per cent profit."

"Which we could split?"

"Fifty-fifty. And I take all the risks, remember."

"All right. I listened to you. Now you listen to me." I raised my voice because I was just too mad to be polite anymore. "When you turn off Sally's motor, you hurt her. How would you like to be kicked unconscious? That's what you do to Sally, when you turn her off."

"You're exaggerating, Jake. The automatobuses get turned off every night."

"Sure, that's why I want none of my boys or girls in your fancy '57 bodies, where I won't know what treatment they'll get. Buses need major repairs in their positronic circuits every couple of years. Old Matthew hasn't had his circuits touched in twenty years. What can you offer him compared with that?"

"Well, you're excited now. Suppose you think over my

proposition when you've cooled down and get in touch with me."

"I've thought it over all I want to. If I ever see you again, I'll call the police."

His mouth got hard and ugly. He said, "Just a minute, old-timer."

I said, "Just a minute, you. This is private property and I'm ordering you off."

He shrugged. "Well, then, goodbye."

I said, "Mrs. Hester will see you off the property. Make that goodbye permanent."

But it wasn't permanent. I saw him again two days later. Two and a half days, rather, because it was about noon when I saw him first and a little after midnight when I saw him again.

I sat up in bed when he turned the light on, blinking blindly till I made out what was happening. Once I could see, it didn't take much explaining. In fact, it took none at all. He had a gun in his right fist, the nasty little needle barrel just visible between two fingers. I knew that all he had to do was to increase the pressure of his hands and I would be torn apart.

He said, "Put on your clothes, Jake."

I didn't move. I just watched him.

He said, "Look, Jake, I know the situation. I visited you two days ago, remember. You have no guards on this place, no electrified fences, no warning signals. Nothing."

I said, "I don't need any. Meanwhile there's nothing to stop you from leaving, Mr. Gellhorn. I would if I were you. This place can be very dangerous."

He laughed a little. "It is, for anybody on the wrong side of a fist gun."

"I see it," I said. "I know you've got one."

"Then get a move on. My men are waiting."

"No, sir, Mr. Gellhorn. Not unless you tell me what you want, and probably not then."

"I made you a proposition day before yesterday."

"The answer's still no."

"There's more to the proposition now. I've come here with some men and an automatobus. You have your chance to come with me and disconnect twenty-five of the positronic motors. I don't care which twenty-five you choose. We'll load them on the bus and take them away. Once they're disposed of, I'll see to it that you get your fair share of the money."

"I have your word on that, I suppose."

He didn't act as if he thought I was being sarcastic. He said, "You have."

I said, "No."

"If you insist on saying no, we'll go about it in our own way. I'll disconnect the motors myself, only I'll disconnect all fifty-one. Every one of them."

"It isn't easy to disconnect the positronic motors, Mr. Gellhorn. Are you a robotics expert? Even if you are, you know, these motors have been modified by me."

"I know that, Jake. And to be truthful, I'm not an expert. I may ruin quite a few motors trying to get them out. That's why I'll have to work over all fifty-one if you don't cooperate. You see, I may only end up with twenty-five when I'm through. The first few I'll tackle will probably suffer the most. Till I get the hang of it, you see. And if I go it myself, I think I'll put Sally first in line."

I said, "I can't believe you're serious, Mr. Gellhorn."

He said, "I'm serious, Jake." He let it all dribble in. "If you want to help, you can keep Sally. Otherwise, she's liable to be hurt very badly. Sorry."

I said, "I'll come with you, but I'll give you one more warning. You'll be in trouble, Mr. Gellhorn."

He thought that was very funny. He was laughing very quietly as we went down the stairs together.

There was an automatobus waiting outside the driveway to the garage apartments. The shadows of three men waited

beside it, and their flash beams went on as we approached.

Gellhorn said in a low voice, "I've got the old fellow. Come on. Move the truck up the drive and let's get started."

One of the others leaned in and punched the proper instructions on the control panel. We moved up the driveway with the bus following submissively.

"It won't go inside the garage," I said. "The door won't take it. We don't have buses here. Only private cars."

"All right," said Gellhorn. "Pull it over onto the grass and keep it out of sight."

I could hear the thrumming of the cars when we were still ten yards from the garage.

Usually they quieted down if I entered the garage. This time they didn't. I think they knew that strangers were about, and once the faces of Gellhorn and the others were visible they got noisier. Each motor was a warm rumble, and each motor was knocking irregularly until the place rattled.

The lights went up automatically as we stepped inside. Gellhorn didn't seem bothered by the car noise, but the three men with him looked surprised and uncomfortable. They had the look of the hired thug about them, a look that was not compounded of physical features so much as of a certain wariness of eye and hang-dogness of face. I knew the type and I wasn't worried.

One of them said, "Damn it, they're burning gas."

"My cars always do," I replied stiffly.

"Not tonight," said Gellhorn. "Turn them off."

"It's not that easy, Mr. Gellhorn," I said.

"Get started!" he said.

I stood there. He had his fist gun pointed at me steadily. I said, "I told you, Mr. Gellhorn, that my cars have been well-treated while they've been at the Farm. They're used to being treated that way, and they resent anything else."

"You have one minute," he said. "Lecture me some other time."

"I'm trying to explain something. I'm trying to explain that my cars can understand what I say to them. A

positronic motor will learn to do that with time and patience. My cars have learned. Sally understood your proposition two days ago. You'll remember she laughed when I asked her opinion. She also knows what you did to her and so do the two sedans you scattered. And the rest know what to do about trespassers in general."

"Look, you crazy old fool—"

"All I have to say is—" I raised my voice. "Get them!"

One of the men turned pasty and yelled, but his voice was drowned completely in the sound of fifty-one horns turned loose at once. They held their notes, and within the four walls of the garage the echoes rose to a wild, metallic call. Two cars rolled forward, not hurriedly, but with no possible mistake as to their target. Two cars fell in line behind the first two. All the cars were stirring in their separate stalls.

The thugs stared, then backed.

I shouted, "Don't get up against a wall."

Apparently, they had that instinctive thought themselves. They rushed madly for the door of the garage.

At the door one of Gellhorn's men turned, brought up a fist gun of his own. The needle pellet tore a thin, blue flash toward the first car. The car was Giuseppe.

A thin line of paint peeled up Giuseppe's hood, and the right half of his windshield crazed and splintered but did not break through.

The men were out the door, running, and two by two the cars crunched out after them into the night, their horns calling the charge.

I kept my hand on Gellhorn's elbow, but I don't think he could have moved in any case. His lips were trembling.

I said, "That's why I don't need electrified fences or guards. My property protects itself."

Gellhorn's eyes swiveled back and forth in fascination as, pair by pair, they whizzed by. He said, "They're killers!"

"Don't be silly. They won't kill your men."

"They're killers!"

"They'll just give your men a lesson. My cars have been

specially trained for cross-country pursuit for just such an occasion; I think what your men will get will be worse than an outright quick kill. Have you ever been chased by an automatobile?"

Gellhorn didn't answer.

I went on. I didn't want him to miss a thing. "They'll be shadows going no faster than your men, chasing them here, blocking them there, blaring at them, dashing at them, missing with a screech of brake and a thunder of motor. They'll keep it up till your men drop, out of breath and half-dead, waiting for the wheels to crunch over their breaking bones. The cars won't do that. They'll turn away. You can bet, though, that your men will never return here in their lives. Not for all the money you or ten like you could give them. Listen—"

I tightened my hold on his elbow. He strained to hear.

I said, "Don't you hear car doors slamming."

It was faint and distant, but unmistakable.

I said, "They're laughing. They're enjoying themselves."

His face crumpled with rage. He lifted his hand. He was still holding his fist gun.

I said, "I wouldn't. One automatocar is still with us."

I don't think he had noticed Sally till then. She had moved up so quietly. Though her right front fender nearly touched me, I couldn't hear her motor. She might have been holding her breath.

Gellhorn yelled.

I said, "She won't touch you, as long as I'm with you. But if you kill me . . . You know, Sally doesn't like you."

Gellhorn turned the gun in Sally's direction.

"Her motor is shielded," I said, "and before you could ever squeeze the gun a second time she would be on top of you."

"All right, then," he yelled, and suddenly my arm was bent behind my back and twisted so I could hardly stand. He

held me between Sally and himself, and his pressure didn't let up. "Back out with me and don't try to break loose, old-timer, or I'll tear your arm out of its socket."

I had to move. Sally nudged along with us, worried, uncertain what to do. I tried to say something to her and couldn't. I could only clench my teeth and moan.

Gellhorn's automatobus was still standing outside the garage. I was forced in. Gellhorn jumped in after me, locking the doors.

He said, "All right, now. We'll talk sense."

I was rubbing my arm, trying to get life back into it, and even as I did I was automatically and without any conscious effort studying the control board of the bus.

I said, "This is a rebuilt job."

"So?" he said caustically. "It's a sample of my work. I picked up a discarded chassis, found a brain I could use and spliced me a private bus. What of it?"

I tore at the repair panel, forcing it aside.

He said, "What the hell. Get away from that." The side of his palm came down numbingly on my left shoulder.

I struggled with him. "I don't want to do this bus any harm. What kind of a person do you think I am? I just want to take a look at some of the motor connections."

It didn't take much of a look. I was boiling when I turned to him. I said, "You're a hound and a bastard. You had no right installing this motor yourself. Why didn't you get a robotics man?"

He said, "Do I look crazy?"

"Even if it was a stolen motor, you had no right to treat it so. I wouldn't treat a man the way you treated that motor. Solder, tape, and pinch clamps! It's brutal!"

"It works, doesn't it?"

"Sure it works, but it must be hell for the bus. You could live with migraine headaches and acute arthritis, but it wouldn't be much of a life. This car is *suffering*."

"Shut up!" For a moment he glanced out the window at

Sally, who had rolled up as close to the bus as she could. He made sure the doors and windows were locked.

He said, "We're getting out of here now, before the other cars come back. We'll stay away."

"How will that help you?"

"Your cars will run out of gas someday, won't they? You haven't got them fixed up so they can tank up on their own, have you? We'll come back and finish the job."

"They'll be looking for me," I said. "Mrs. Hester will call the police."

He was past reasoning with. He just punched the bus in gear. It lurched forward. Sally followed.

He giggled. "What can she do if you're here with me?"

Sally seemed to realize that, too. She picked up speed, passed us and was gone. Gellhorn opened the window next to him and spat through the opening.

The bus lumbered on over the dark road, its motor rattling unevenly. Gellhorn dimmed the periphery light until the phosphorescent green stripe down the middle of the highway, sparkling in the moonlight, was all that kept us out of the trees. There was virtually no traffic. Two cars passed ours, going the other way, and there was none at all on our side of the highway, either before or behind.

I heard the door-slamming first. Quick and sharp in the silence, first on the right and then on the left. Gellhorn's hands quivered as he punched savagely for increased speed. A beam of light shot out from among a scrub of trees, blinding us. Another beam plunged at us from behind the guard rails on the other side. At a crossover, four hundred yards ahead, there was a sque-e-e-e-e as a car darted across our path.

"Sally went for the rest," I said. "I think you're surrounded."

"So what? What can they do?"

He hunched over the controls, peering through the windshield.

"And don't *you* try anything, old-timer," he muttered.

I couldn't. I was bone-weary; my left arm was on fire.

The motor sounds gathered and grew closer. I could hear the motors missing in odd patterns; suddenly it seemed to me that my cars were speaking to one another.

A medley of horns came from behind. I turned and Gellhorn looked quickly into the rear-view mirror. A dozen cars were following in both lanes.

Gellhorn yelled and laughed madly.

I cried, "Stop! Stop the car!"

Because not a quarter of a mile ahead, plainly visible in the light beams of two sedans on the roadside was Sally, her trim body plunked square across the road. Two cars shot into the opposite lane to our left, keeping perfect time with us and preventing Gellhorn from turning out.

But he had no intention of turning out. He put his finger on the full-speed-ahead button and kept it there.

He said, "There'll be no bluffing here. This bus outweighs her five to one, old-timer, and we'll just push her off the road like a dead kitten."

I knew he could. The bus was on manual and his finger was on the button. I knew he would.

I lowered the window, and stuck my head out. "Sally," I screamed. "Get out of the way. *Sally!*"

It was drowned out in the agonized squeal of maltreated brakebands. I felt myself thrown forward and heard Gellhorn's breath puff out of his body.

I said, "What happened?" It was a foolish question. We had stopped. That was what had happened. Sally and the bus were five feet apart. With five times her weight tearing down on her, she had not budged. The guts of her.

Gellhorn yanked at the Manual toggle switch. "It's got to," he kept muttering. "It's got to."

I said, "Not the way you hooked up the motor, expert. Any of the circuits could cross over."

He looked at me with a tearing anger and growled deep in his throat. His hair was matted over his forehead. He lifted his fist.

"That's all the advice out of you there'll ever be, old-timer."

And I knew the needle gun was about to fire.

I pressed back against the bus door, watching the fist come up, and when the door opened I went over backward and out, hitting the ground with a thud. I heard the door slam closed again.

I got to my knees and looked up in time to see Gellhorn struggle uselessly with the closing window, then aim his fist-gun quickly through the glass. He never fired. The bus got under way with a tremendous roar, and Gellhorn lurched backward.

Sally wasn't in the way any longer, and I watched the bus's rear lights flicker away down the highway.

I was exhausted. I sat down right there, right on the highway, and put my head down in my crossed arms, trying to catch my breath.

I heard a car stop gently at my side. When I looked up, it was Sally. Slowly—lovingly, you might say—her front door opened.

No one had driven Sally for five years—except Gellhorn, of course—and I know how valuable such freedom was to a car. I appreciated the gesture, but I said, "Thanks, Sally, but I'll take one of the newer cars."

I got up and turned away, but skillfully and neatly as a pirouette, she wheeled before me again. I couldn't hurt her feelings. I got in. Her front seat had the fine, fresh scent of an automatobile that kept itself spotlessly clean. I lay down across it, thankfully, and with even, silent, and rapid efficiency, my boys and girls brought me home.

Mrs. Hester brought me the copy of the radio transcript the next evening with great excitement.

"It's Mr. Gellhorn," she said. "The man who came to see you."

"What about him?"

I dreaded her answer.

"They found him dead," she said. "Imagine that. Just lying dead in a ditch."

"It might be a stranger altogether," I mumbled.

"Raymond J. Gellhorn," she said, sharply. "There can't be two, can there? The description fits, too. Lord, what a way to die? They found tire marks on his arms and body. Imagine! I'm glad it turned out to be a bus; otherwise they might have come poking around here."

"Did it happen near here?" I asked, anxiously.

"No . . . near Cooksville. But, goodness, read about it yourself if you—What happened to Giuseppe?"

I welcomed the diversion. Giuseppe was waiting patiently for me to complete the repaint job. His windshield had been replaced.

After she left, I snatched up the transcript. There was no doubt about it. The doctor reported he had been running and was in a state of totally spent exhaustion. I wondered for how many miles the bus had played with him before the final lunge. The transcript had no notion of anything like that, of course.

They had located the bus and identified it by the tire tracks. The police had it and were trying to trace its ownership.

There was an editorial in the transcript about it. It had been the first traffic fatality in the state for that year and the paper warned strenuously against manual driving after night.

There was no mention of Gellhorn's three thugs and for that, at least, I was grateful. None of our cars had been seduced by the pleasure of the chase into killing.

That was all. I let the paper drop. Gellhorn had been a criminal. His treatment of the bus had been brutal. There was no question in my mind he deserved death. But still I felt a bit queasy over the manner of it.

A month has passed now and I can't get it out of my mind.

My cars talk to one another. I have no doubt about it anymore. It's as though they've gained confidence; as though they're not bothering to keep it secret anymore. Their engines rattle and knock continuously.

And they don't talk among themselves only. They talk to the cars and buses that come into the Farm on business. How long have they been doing that?

They must be understood, too. Gellhorn's bus understood them, for all it hadn't been on the grounds more than an hour. I can close my eyes and bring back that dash along the highway, with our cars flanking the bus on either side, clacking their motors at it till it understood, stopped, let me out, and ran off with Gellhorn.

Did my cars tell him to kill Gellhorn? Or was that his idea?

Can cars have such ideas? The motor designers say no. But they mean under ordinary conditions. Have they foreseen *everything*?

Cars get ill-used, you know.

Some of them enter the Farm and observe. They get told things. They find out that cars exist whose motors are never stopped, whom no one ever drives, whose every need is supplied.

Then maybe they go out and tell others. Maybe the word is spreading quickly. Maybe they're going to think that the Farm way should be the way all over the world. They don't understand. You couldn't expect them to understand about legacies and the whims of rich men.

There are millions of automatobiles on Earth, tens of millions. If the thought gets rooted in them that they're slaves; that they should do something about it . . . If they begin to think the way Gellhorn's bus did . . .

Maybe it won't be till after my time. And then they'll have to keep a few of us to take care of them, won't they? They wouldn't kill us all.

And maybe they would. Maybe they wouldn't understand

about how someone would have to care for them. Maybe they won't wait.

Every morning I wake up and think, Maybe today . . .

I don't get as much pleasure out of my cars as I used to. Lately, I notice that I'm even beginning to avoid Sally.

THE FUN THEY HAD

Margie even wrote about it that night in her diary. On the page headed May 17, 2157, she wrote, "Today Tommy found a real book!"

It was a very old book. Margie's grandfather once said that when he was a little boy *his* grandfather told him that there was a time when all stories were printed on paper.

They turned the pages, which were yellow and crinkly, and it was awfully funny to read words that stood still instead of moving the way they were supposed to—on a screen, you know. And then, when they turned back to the page before, it had the same words on it that it had had when they read it the first time.

"Gee," said Tommy, "what a waste. When you're through with the book, you just throw it away, I guess. Our television screen must have had a million books on it and it's good for plenty more. I wouldn't throw *it* away."

"Same with mine," said Margie. She was eleven and hadn't seen as many telebooks as Tommy had. He was thirteen.

She said, "Where did you find it?"

"In my house." He pointed without looking, because he was busy reading. "In the attic."

"What's it about?"

"School."

Margie was scornful. "School? What's there to write about school? I hate school."

Margie always hated school, but now she hated it more than ever. The mechanical teacher had been giving her test after test in geography and she had been doing worse and worse until her mother had shaken her head sorrowfully and sent for the County Inspector.

He was a round little man with a red face and a whole box of tools with dials and wires. He smiled at Margie and gave her an apple, then took the teacher apart. Margie had hoped he wouldn't know how to put it together again, but he knew how all right, and, after an hour or so, there it was again, large and black and ugly, with a big screen on which all the lessons were shown and the questions were asked. That wasn't so bad. The part Margie hated most was the slot where she had to put homework and test papers. She always had to write them out in a punch code they made her learn when she was six years old, and the mechanical teacher calculated the mark in no time.

The Inspector had smiled after he was finished and patted Margie's head. He said to her mother, "It's not the little girl's fault, Mrs. Jones. I think the geography sector was geared a little too quick. Those things happen sometimes. I've slowed it up to an average ten-year level. Actually, the over-all pattern of her progress is quite satisfactory." And he patted Margie's head again.

Margie was disappointed. She had been hoping they would take the teacher away altogether. They had once taken Tommy's teacher away for nearly a month because the history sector had blanked out completely.

So she said to Tommy, "Why would anyone write about school?"

Tommy looked at her with very superior eyes. "Because it's not our kind of school, stupid. This is the old kind of school that they had hundreds and hundreds of years ago."

He added loftily, pronouncing the word carefully, "*Centuries* ago."

Margie was hurt. "Well, I don't know what kind of school they had all that time ago." She read the book over his shoulder for a while, then said, "Anyway, they had a teacher."

"Sure they had a teacher, but it wasn't a *regular* teacher. It was a man."

"A man? How could a man be a teacher?"

"Well, he just told the boys and girls things and gave them homework and asked them questions."

"A man isn't smart enough."

"Sure he is. My father knows as much as my teacher."

"He can't. A man can't know as much as a teacher."

"He knows almost as much, I betcha."

Margie wasn't prepared to dispute that. She said, "I wouldn't want a strange man in my house to teach me."

Tommy screamed with laughter. "You don't know much, Margie. The teachers didn't live in the house. They had a special building and all the kids went there."

"And all the kids learned the same thing?"

"Sure, if they were the same age."

"But my mother says a teacher had to be adjusted to fit the mind of each boy and girl it teaches and that each kid has to be taught differently."

"Just the same they didn't do it that way then. If you don't like it, you don't have to read the book."

"I didn't say I didn't like it," Margie said quickly. She wanted to read about those funny schools.

They weren't even half-finished when Margie's mother called, "Margie! School!"

Margie looked up. "Not yet, Mamma."

"Now!" said Mrs. Jones. "And it's probably time for Tommy, too."

Margie said to Tommy, "Can I read the book some more with you after school?"

"Maybe," he said nonchalantly. He walked away whistling, the dusty old book tucked beneath his arm.

Margie went into the schoolroom. It was right next to her bedroom, and the mechanical teacher was on and waiting for her. It was always on at the same time every day except Saturday and Sunday, because her mother said little girls learned better if they learned at regular hours.

The screen was lit up, and it said: "Today's arithmetic lesson is on the addition of proper fractions. Please insert yesterday's homework in the proper slot."

Margie did so with a sigh. She was thinking about the old schools they had when her grandfather's grandfather was a little boy. All the kids from the whole neighborhood came, laughing and shouting in the schoolyard, sitting together in the schoolroom, going home together at the end of the day. They learned the same things, so they could help one another on the homework and talk about it.

And the teachers were people . . .

The mechanical teacher was flashing on the screen: "When we add the fractions ½ and ¼—"

Margie was thinking about how the kids must have loved it in the old days. She was thinking about the fun they had.

FRANCHISE

Linda, age ten, was the only one of the family who seemed to enjoy being awake.

Norman Muller could hear her now through his own drugged, unhealthy coma. (He had finally managed to fall asleep an hour earlier but even then it was more like exhaustion than sleep.)

She was at his bedside now, shaking him. "Daddy, Daddy, wake up. Wake up!"

He suppressed a groan. "All right, Linda."

"But, Daddy, there's more policemen around than any time. Police cars and everything!"

Norman Muller gave up and rose blearily to his elbows. The day was beginning. It was faintly stirring toward dawn outside, the germ of a miserable gray that looked about as miserably gray as he felt. He could hear Sarah, his wife, shuffling about breakfast duties in the kitchen. His father-in-law, Matthew, was hawking strenuously in the bathroom. No doubt Agent Handley was ready and waiting for him.

This was *the* day.

Election Day!

To begin with, it had been like every other year. Maybe a little worse, because it was a presidential year, but no worse than other presidential years if it came to that.

The politicians spoke about the guh-reat electorate and the vast electuh-ronic intelligence that was its servant. The press analyzed the situation with industrial computers (the New York *Times* and the St. Louis *Post-Dispatch* had their own computers) and were full of little hints as to what would be forthcoming. Commentators and columnists pinpointed the crucial state and county in happy contradiction to one another.

The first hint that it would *not* be like every other year was when Sarah Muller said to her husband on the evening of October 4 (with Election Day exactly a month off), "Cantwell Johnson says that Indiana will be the state this year. He's the fourth one. Just think, *our* state this time."

Matthew Hortenweiler took his fleshy face from behind the paper, stared dourly at his daughter and growled, "Those fellows are paid to tell lies. Don't listen to them."

"Four of them, Father," said Sarah mildly. "They all say Indiana."

"Indiana *is* a key state, Matthew," said Norman, just as mildly, "on account of the Hawkins-Smith Act and this mess in Indianapolis. It—"

Matthew twisted his old face alarmingly and rasped out, "No one says Bloomington or Monroe County, do they?"

"Well—" said Norman.

Linda, whose little pointed-chinned face had been shifting from one speaker to the next, said pipingly, "You going to be voting this year, Daddy?"

Norman smiled gently and said, "I don't think so, dear."

But this was in the gradually growing excitement of an October in a presidential election year and Sarah had led a quiet life with dreams for her companions. She said longingly, "Wouldn't *that* be wonderful, though?"

"If I voted?" Norman Muller had a small blond mustache that had given him a debonair quality in the young Sarah's eyes, but which, with gradual graying, had declined merely to lack of distinction. His forehead bore deepening lines born of uncertainty and, in general, he had never seduced

his clerkly soul with the thought that he was either born great or would under any circumstances achieve greatness. He had a wife, a job and a little girl, and except under extraordinary conditions of elation or depression was inclined to consider that to be an adequate bargain struck with life.

So he was a little embarrassed and more than a little uneasy at the direction his wife's thoughts were taking. "Actually, my dear," he said, "there are two hundred million people in the country, and, with odds like that, I don't think we ought to waste our time wondering about it."

His wife said, "Why, Norman, it's no such thing like two hundred million and you know it. In the first place, only people between twenty and sixty are eligible and it's always men, so that puts it down to maybe fifty million to one. Then, if it's really Indiana—"

"Then it's about one and a quarter million to one. You wouldn't want me to bet in a horse race against those odds, now, would you? Let's have supper."

Matthew muttered from behind his newspaper, "Damned foolishness."

Linda asked again, "You going to be voting this year, Daddy?"

Norman shook his head and they all adjourned to the dining room.

By October 20, Sarah's excitement was rising rapidly. Over the coffee, she announced that Mrs. Schultz, having a cousin who was the secretary of an Assemblyman, said that all the "smart money" was on Indiana.

"She says President Villers is even going to make a speech at Indianapolis."

Norman Muller, who had had a hard day at the store, nudged the statement with a raising of eyebrows and let it go at that.

Matthew Hortenweiler, who was chronically dissatisfied with Washington, said, "If Villers makes a speech in

Indiana, that means he thinks Multivac will pick Arizona. He wouldn't have the guts to go closer, the mushhead."

Sarah, who ignored her father whenever she could decently do so, said, "I don't know why they don't announce the state as soon as they can, and then the county and so on. Then the people who were eliminated could relax."

"If they did anything like that," pointed out Norman, "the politicians would follow the announcements like vultures. By the time it was narrowed down to a township, you'd have a Congressman or two at every street corner."

Matthew narrowed his eyes and brushed angrily at his sparse, gray hair. "They're vultures, anyhow. Listen—"

Sarah murmured, "Now, Father—"

Matthew's voice rumbled over her protest without as much as a stumble or hitch. "Listen, I was around when they set up Multivac. It would end partisan politics, they said. No more voters' money wasted on campaigns. No more grinning nobodies high-pressured and advertising-campaigned into Congress or the White House. So what happens. More campaigning than ever, only now they do it blind. They'll send guys to Indiana on account of the Hawkins-Smith Act and other guys to California in case it's the Joe Hammer situation that turns out crucial. I say, wipe out all that nonsense. Back to the good old—"

Linda asked suddenly, "Don't you want Daddy to vote this year, Grandpa?"

Matthew glared at the young girl. "Never you mind, now." He turned back to Norman and Sarah. "There was a time I voted. Marched right up to the polling booth, stuck my fist on the levers and voted. There was nothing to it. I just said: This fellow's my man and I'm voting for him. *That's* the way it should be."

Linda said excitedly, "You voted, Grandpa? You really did?"

Sarah leaned forward quickly to quiet what might easily become an incongruous story drifting about the neighbor-

hood. "It's nothing, Linda. Grandpa doesn't really mean voted. Everyone did that kind of voting, your grandpa, too, but it wasn't *really* voting."

Matthew roared, "It wasn't when I was a little boy. I was twenty-two and I voted for Langley and it was real voting. My vote didn't count for much, maybe, but it was as good as anyone else's. *Anyone* else's. And no Multivac to—"

Norman interposed, "All right, Linda, time for bed. And stop asking questions about voting. When you grow up, you'll understand all about it."

He kissed her with antiseptic gentleness and she moved reluctantly out of range under maternal prodding and a promise that she might watch the bedside video till 9:15, *if* she was prompt about the bathing ritual.

Linda said, "Grandpa," and stood with her chin down and her hands behind her back until his newspaper lowered itself to the point where shaggy eyebrows and eyes, nested in fine wrinkles, showed themselves. It was Friday, October 31.

He said, "Yes?"

Linda came closer and put both her forearms on one of the old man's knees so that he had to discard his newspaper altogether.

She said, "Grandpa, did you really once vote?"

He said, "You heard me say I did, didn't you? Do you think I tell fibs?"

"N-no, but Mamma says everybody voted then."

"So they did."

"But how could they? How could *everybody* vote?"

Matthew stared at her solemnly, then lifted her and put her on his knee.

He even moderated the tonal qualities of his voice. He said, "You see, Linda, till about forty years ago, everybody always voted. Say we wanted to decide who was to be the new President of the United States. The Democrats and Republicans would both nominate someone, and everybody would say who they wanted. When Election Day was over,

they would count how many people wanted the Democrat and how many wanted the Republican. Whoever had more votes was elected. You see?"

Linda nodded and said, "How did all the people know who to vote for? Did Multivac tell them?"

Matthew's eyebrows hunched down and he looked severe. "They just used their own judgment, girl."

She edged away from him, and he lowered his voice again, "I'm not angry at you, Linda. But, you see, sometimes it took all night to count what everyone said and people were impatient. So they invented special machines which could look at the first few votes and compare them with the votes from the same places in previous years. That way the machine could compute how the total vote would be and who would be elected. You see?"

She nodded. "Like Multivac."

"The first computers were much smaller than Multivac. But the machines grew bigger and they could tell how the election would go from fewer and fewer votes. Then, at last, they built Multivac and it can tell from just one voter."

Linda smiled at having reached a familiar part of the story and said, "That's nice."

Matthew frowned and said, "No, it's not nice. I don't want a machine telling me how I would have voted just because some joker in Milwaukee says he's against higher tariffs. Maybe I wanted to vote cockeyed just for the pleasure of it. Maybe I don't want to vote. Maybe—"

But Linda had wriggled from his knee and was beating a retreat.

She met her mother at the door. Her mother, who was still wearing her coat and had not even had time to remove her hat, said breathlessly, "Run along, Linda. Don't get in Mother's way."

Then she said to Matthew, as she lifted her hat from her head and patted her hair back into place, "I've been at Agatha's."

Matthew stared at her censoriously and did not even

dignify that piece of information with a grunt as he groped for his newspaper.

Sarah said, as she unbuttoned her coat, "Guess what she said?"

Matthew flattened out his newspaper for reading purposes with a sharp crackle and said, "Don't much care."

Sarah said, "Now, Father—" But she had no time for anger. The news had to be told and Matthew was the only recipient handy, so she went on, "Agatha's Joe is a policeman, you know, and he says a whole truckload of secret service men came into Bloomington last night."

"They're not after me."

"Don't you see, Father? Secret service agents, and it's almost election time. In *Bloomington*."

"Maybe they're after a bank robber."

"There hasn't been a bank robbery in town in ages . . . Father, you're hopeless."

She stalked away.

Nor did Norman Muller receive the news with noticeably greater excitement.

"Now, Sarah, how did Agatha's Joe know they were secret service agents?" he asked calmly. "They wouldn't go around with identification cards pasted on their foreheads."

But by next evening, with November a day old, she could say triumphantly, "It's just everyone in Bloomington that's waiting for someone local to be the voter. The Bloomington *News* as much as said so on video."

Norman stirred uneasily. He couldn't deny it, and his heart was sinking. If Bloomington was really to be hit by Multivac's lightning, it would mean newspapermen, video shows, tourists, all sorts of—strange upsets. Norman liked the quiet routine of his life, and the distant stir of politics was getting uncomfortably close.

He said, "It's all rumor. Nothing more."

"You wait and see, then, You just wait and see."

As things turned out, there was very little time to wait,

for the doorbell rang insistently, and when Norman Muller opened it and said, "Yes?" a tall, grave-faced man said, "Are you Norman Muller?"

Norman said, "Yes," again, but in a strange dying voice. It was not difficult to see from the stranger's bearing that he was one carrying authority, and the nature of his errand suddenly became as inevitably obvious as it had, until the moment before, been unthinkably impossible.

The man presented credentials, stepped into the house, closed the door behind him and said ritualistically, "Mr. Norman Muller, it is necessary for me to inform you on behalf of the President of the United States that you have been chosen to represent the American electorate on Tuesday, November 4, 2008."

Norman Muller managed, with difficulty, to walk unaided to his chair. He sat there, white-faced and almost insensible, while Sarah brought water, slapped his hands in panic and moaned to her husband between clenched teeth, "Don't be sick, Norman. *Don't* be sick. They'll pick someone else."

When Norman could manage to talk, he whispered, "I'm sorry, sir."

The secret service agent had removed his coat, unbuttoned his jacket and was sitting at ease on the couch.

"It's all right," he said, and the mark of officialdom seemed to have vanished with the formal announcement and leave him simply a large and rather friendly man. "This is the sixth time I've made the announcement and I've seen all kinds of reactions. Not one of them was the kind you see on the video. You know what I mean? A holy, dedicated look, and a character who says, 'It will be a great privilege to serve my country.' That sort of stuff." The agent laughed comfortingly.

Sarah's accompanying laugh held a trace of shrill hysteria.

The agent said, "Now you're going to have me with you

for a while. My name is Phil Handley. I'd appreciate it if you call me Phil. Mr. Muller can't leave the house any more till Election Day. You'll have to inform the department store that he's sick, Mrs. Muller. You can go about your business for a while, but you'll have to agree not to say a word about this. Right, Mrs. Muller?"

Sarah nodded vigorously. "No, sir. Not a word."

"All right. But Mrs. Muller," Handley looked grave, "we're not kidding now. Go out only if you must and you'll be followed when you do. I'm sorry but that's the way we must operate."

"Followed?"

"It won't be obvious. Don't worry. And it's only for two days till the formal announcement to the nation is made. Your daughter—"

"She's in bed," said Sarah hastily.

"Good. She'll have to be told I'm a relative or friend staying with the family. If she does find out the truth, she'll have to be kept in the house. Your father had better stay in the house in any case."

"He won't like that," said Sarah.

"Can't be helped. Now, since you have no others living with you—"

"You know all about us apparently," whispered Norman.

"Quite a bit," agreed Handley. "In any case, those are all my instructions to you for the moment. I'll try to co-operate as much as I can and be as little of a nuisance as possible. The government will pay for my maintenance so I won't be an expense to you. I'll be relieved each night by someone who will sit up in this room, so there will be no problem about sleeping accommodations. Now, Mr. Muller—"

"Sir?"

"You can call me Phil," said the agent again. "The purpose of the two-day preliminary before the formal announcement is to get you used to your position. We prefer to have you face Multivac in as normal a state of mind as

possible. Just relax and try to feel this is all in a day's work. Okay?"

"Okay," said Norman, and then shook his head violently. "But I don't want the responsibility. Why me?"

"All right," said Handley, "let's get that straight to begin with. Multivac weighs all sorts of known factors, billions of them. One factor isn't known, though, and won't be known for a long time. That's the reaction pattern of the human mind. All Americans are subjected to the molding pressure of what other Americans do and say, to the things that are done to him and the things he does to others. Any American can be brought to Multivac to have the bent of his mind surveyed. From that the bent of all other minds in the country can be estimated. Some Americans are better for the purpose than others at some given time, depending upon the happenings of that year. Multivac picked you as most representative this year. Not the smartest, or the strongest, or the luckiest, but just the most representative. Now we don't question Multivac, do we?"

"Couldn't it make a mistake?" asked Norman.

Sarah, who listened impatiently, interrupted to say, "Don't listen to him, sir. He's just nervous, you know. Actually, he's very well read and he always follows politics very closely."

Handley said, "Multivac makes the decisions, Mrs. Muller. It picked your husband."

"But does it know everything?" insisted Norman wildly. "Couldn't it have made a mistake?"

"Yes, it can. There's no point in not being frank. In 1993, a selected Voter died of a stroke two hours before it was time for him to be notified. Multivac didn't predict that; it couldn't. A Voter might be mentally unstable, morally unsuitable, or, for that matter, disloyal. Multivac can't know everything about everybody until he's fed all the data there is. That's why alternative selections are always held in readiness. I don't think we'll be using one this time. You're

in good health, Mr. Muller, and you've been carefully investigated. You qualify."

Norman buried his face in his hands and sat motionless.

"By tomorrow morning, sir," said Sarah, "he'll be perfectly all right. He just has to get used to it, that's all."

"Of course," said Handley.

In the privacy of their bedchamber, Sarah Muller expressed herself in other and stronger fashion. The burden of her lecture was, "So get hold of yourself, Norman. You're trying to throw away the chance of a lifetime."

Norman whispered desperately, "It frightens me, Sarah. The whole thing."

"For goodness' sake, why? What's there to it but answering a question or two?"

"The responsibility is too great. I couldn't face it."

"What responsibility? There isn't any. Multivac picked you. It's Multivac's responsibility. Everyone knows that."

Norman sat up in bed in a sudden excess of rebellion and anguish. "Everyone is *supposed* to know that. But they don't. They—"

"Lower your voice," hissed Sarah icily. "They'll hear you downtown."

"They don't," said Norman, declining quickly to a whisper. "When they talk about the Ridgely administration in 1988, do they say he won them over with pie-in-the-sky promises and racist baloney? No! They talk about the 'goddam MacComber vote,' as though Humphrey MacComber was the only man who had anything to do with it because he faced Multivac. I've said it myself—only now I think the poor guy was just a truck farmer who didn't ask to be picked. Why was it his fault more than anyone else's? Now his name is a curse."

"You're just being childish," said Sarah.

"I'm being sensible. I tell you, Sarah, I won't accept. They can't make me vote if I don't want to. I'll say I'm sick. I'll say—"

But Sarah had had enough. "Now you listen to me," she whispered in a cold fury. "You don't have only yourself to think about. You know what it means to be Voter of the Year. A presidential year at that. It means publicity and fame, and, maybe, buckets of money—"

"And then I go back to being a clerk."

"You will *not*. You'll have a branch managership at the least if you have any brains at all, and you *will* have, because I'll tell you what to do. You control the kind of publicity if you play your cards right, and you can force Kennell Stores, Inc., into a tight contract *and* an escalator clause in connection with your salary *and* a decent pension plan."

"That's not the point in being Voter, Sarah."

"That will be your point. If you don't owe anything to yourself or to me—I'm not asking for myself—you owe something to Linda."

Norman groaned.

"Well, don't you?" snapped Sarah.

"Yes, dear," murmured Norman.

On November 3, the official announcement was made and it was too late for Norman to back out even if he had been able to find the courage to make the attempt.

Their house was sealed off. Secret service agents made their appearance in the open, blocking off all approach.

At first the telephone rang incessantly, but Philip Handley with an engagingly apologetic smile took all calls. Eventually, the exchange shunted all calls directly to the police station.

Norman imagined that, in that way, he was spared not only the bubbling (and envious?) congratulations of friends, but also the egregious pressure of salesmen scenting a prospect and the designing smoothness of politicians from all over the nation . . . Perhaps even death threats from the inevitable cranks.

Newspapers were forbidden to enter the house now in

order to keep out weighted pressures, and television was gently but firmly disconnected, over Linda's loud protests.

Matthew growled and stayed in his room; Linda, after the first flurry of excitement, sulked and whined because she could not leave the house; Sarah divided her time between preparation of meals for the present and plans for the future; and Norman's depression lived and fed upon itself.

And the morning of Tuesday, November 4, 2008, came at last, and it was Election Day.

It was early breakfast, but only Norman Muller ate, and that mechanically. Even a shower and shave had not succeeded in either restoring him to reality or removing his own conviction that he was as grimy without as he felt within.

Handley's friendly voice did its best to shed some normality over the gray and unfriendly dawn. (The weather prediction had been for a cloudy day with prospects of rain before noon.)

Handley said, "We'll keep this house insulated till Mr. Muller is back, but after that we'll be off your necks." The secret service agent was in full uniform now, including sidearms in heavily brassed holsters.

"You've been no trouble at all, Mr. Handley," simpered Sarah.

Norman drank through two cups of black coffee, wiped his lips with a napkin, stood up and said haggardly, "I'm ready."

Handley stood up, too. "Very well, sir. And thank you, Mrs. Muller, for your very kind hospitality."

The armored car purred down empty streets. They were empty even for that hour of the morning.

Handley indicated that and said, "They always shift traffic away from the line of drive ever since the attempted bombing that nearly ruined the Leverett Election of '92."

When the car stopped, Norman was helped out by the

always polite Handley into an underground drive whose walls were lined with soldiers at attention.

He was led into a brightly lit room, in which three white-uniformed men greeted him smilingly.

Norman said sharply, "But this is the hospital."

"There's no significance to that," said Handley at once. "It's just that the hospital has the necessary facilities."

"Well, what do I do?"

Handley nodded. One of the three men in white advanced and said, "I'll take over now, agent."

Handley saluted in an offhand manner and left the room.

The man in white said, "Won't you sit down, Mr. Muller? I'm John Paulson, Senior Computer. These are Samson Levine and Peter Dorogobuzh, my assistants."

Norman shook hands numbly all about. Paulson was a man of middle height with a soft face that seemed used to smiling and a very obvious toupee. He wore plastic-rimmed glasses of an old-fashioned cut, and he lit a cigarette as he talked. (Norman refused his offer of one.)

Paulson said, "In the first place, Mr. Muller, I want you to know we are in no hurry. We want you to stay with us all day if necessary, just so that you get used to your surroundings and get over any thought you might have that there is anything unusual in this, anything clinical, if you know what I mean."

"It's all right," said Norman. "I'd just as soon this were over."

"I understand your feelings. Still, we want you to know exactly what's going on. In the first place, Multivac isn't here."

"It isn't?" Somehow through all his depression, he had still looked forward to seeing Multivac. They said it was half a mile long and three stories high, that fifty technicians walked the corridors *within* its structure continuously. It was one of the wonders of the world.

Paulson smiled. "No. It's not portable, you know. It's located underground, in fact, and very few people know

exactly where. You can understand that, since it is our greatest natural resource. Believe me, elections aren't the only things it's used for."

Norman thought he was being deliberately chatty and found himself intrigued all the same. "I thought I'd see it. I'd like to."

"I'm sure of that. But it takes a presidential order and even then it has to be countersigned by Security. However, we are plugged into Multivac right here by beam transmission. What Multivac says can be interpreted here and what we say is beamed directly to Multivac, so we're in its presence."

Norman looked about. The machines within this room were all meaningless to him.

"Now let me explain, Mr. Muller," Paulson went on. "Multivac already has most of the information it needs to decide all the elections, national, state and local. It needs only to check certain imponderable attitudes of mind and it will use you for that. We can't predict what questions it will ask, but they may not make much sense to you, or even to us. It may ask you how you feel about garbage disposal in your town; whether you favor central incinerators. It might ask you whether you have a doctor of your own or whether you make use of National Medicine, Inc. Do you understand?"

"Yes, sir."

"Whatever it asks, you answer in your own words in any way you please. If you feel you must explain quite a bit, do so. Talk an hour, if necesary."

"Yes, sir."

"Now, one more thing. We will have to make use of some simple devices which will automatically record your blood pressure, heartbeat, skin conductivity and brain-wave pattern while you speak. The machinery will seem formidable, but it's all absolutely painless. You won't even know it's going on."

The other two technicians were already busying themselves with smooth-gleaming apparatus on oiled wheels.

Norman said, "Is that to check on whether I'm lying or not?"

"Not at all, Mr. Muller. There's no question of lying. It's only a matter of emotional intensity. If the machine asks you your opinion of your child's school, you may say, 'I think it is overcrowded.' Those are only words. From the way your brain and heart and hormones and sweat glands work, Multivac can judge exactly how intensely you feel about the matter. It will understand your feelings better than you yourself."

"I never heard of this," said Norman.

"No, I'm sure you didn't. Most of the details of Multivac's workings are top secret. For instance, when you leave, you will be asked to sign a paper swearing that you will never reveal the nature of the questions you were asked, the nature of your responses, what was done, or how it was done. The less is known about the Multivac, the less chance of attempted outside pressures upon the men who service it." He smiled grimly. "Our lives are hard enough as it is."

Norman nodded. "I understand."

"And now would you like anything to eat or drink?"

"No, nothing right now."

"Do you have any questions?"

Norman shook his head.

"Then you tell us when you're ready."

"I'm ready right now."

"You're certain?"

"Quite."

Paulson nodded, and raised his hand in a gesture to the others. They advanced with their frightening equipment, and Norman Muller felt his breath come a little quicker as he watched.

The ordeal lasted nearly three hours, with one short break for coffee and an embarrassing session with a chamber pot.

During all this time, Norman Muller remained encased in machinery. He was bone-weary at the close.

He thought sardonically that his promise to reveal nothing of what had passed would be an easy one to keep. Already the questions were a hazy mishmash in his mind.

Somehow he had thought Multivac would speak in a sepulchral, superhuman voice, resonant and echoing, but that, after all, was just an idea he had from seeing too many television shows, he now decided. The truth was distressingly undramatic. The questions were slips of a kind of metallic foil patterned with numerous punctures. A second machine converted the pattern into words and Paulson read the words to Norman, then gave him the question and let him read it for himself.

Norman's answers were taken down by a recording machine, played back to Norman for confirmation, with emendations and added remarks also taken down. All that was fed into a pattern-making instrument and that, in turn, was radiated to Multivac.

The one question Norman could remember at the moment was an incongruously gossipy: "What do you think of the price of eggs?"

Now it was over, and gently they removed the electrodes from various portions of his body, unwrapped the pulsating band from his upper arm, moved the machinery away.

He stood up, drew a deep, shuddering breath and said, "Is that all? Am I through?"

"Not quite." Paulson hurried to him, smiling in reassuring fashion. "We'll have to ask you to stay another hour."

"Why?" asked Norman sharply.

"It will take that long for Multivac to weave its new data into the trillions of items it has. Thousands of elections are concerned, you know. It's very complicated. And it may be that an odd contest here or there, a comptrollership in Phoenix, Arizona, or some council seat in Wilkesboro, North Carolina, may be in doubt. In that case, Multivac

may be compelled to ask you a deciding question or two."

"No," said Norman. "I won't go through this again."

"It probably won't happen," Paulson said soothingly. "It rarely does. But, just in case, you'll have to stay." A touch of steel, just a touch, entered his voice. "You have no choice, you know. You must."

Norman sat down wearily. He shrugged.

Paulson said, "We can't let you read a newspaper, but if you'd care for a murder mystery, of if you'd like to play chess, or if there's anything we can do for you to help pass the time, I wish you'd mention it."

"It's all right. I'll just wait."

They ushered him into a small room just next to the one in which he had been questioned. He let himself sink into a plastic-covered armchair and closed his eyes.

As well as he could, he must wait out this final hour.

He sat perfectly still and slowly the tension left him. His breathing grew less ragged and he could clasp his hands without being quite so conscious of the trembling of his fingers.

Maybe there would be no questions. Maybe it was all over.

If it *were* over, then the next thing would be torchlight processions and invitations to speak at all sorts of functions. The Voter of the Year!

He, Norman Muller, ordinary clerk of a small department store in Bloomington, Indiana, who had neither been born great nor achieved greatness would be in the extraordinary position of having had greatness thrust upon him.

The historians would speak soberly of the Muller Election of 2008. That would be its name, the Muller Election.

The publicity, the better job, the flash flood of money that interested Sarah so much, occupied only a corner of his mind. It would all be welcome, of course. He couldn't refuse it. But at the moment something else was beginning to concern him.

A latent patriotism was stirring. After all, he was representing the entire electorate. He was the focal point for *them*. He was, in his own person, for this one day, all of America!

The door opened, snapping him to open-eyed attention. For a moment, his stomach constricted. Not more questions!

But Paulson was smiling. "That will be all, Mr. Muller."

"No more questions, sir?"

"None needed. Everything was quite clear-cut. You will be escorted back to your home and then you will be a private citizen once more. Or as much so as the public will allow."

"Thank you. Thank you." Norman flushed and said, "I wonder—who was elected?"

Paulson shook his head. "That will have to wait for the official announcement. The rules are quite strict. We can't even tell you. You understand."

"Of course. Yes." Norman felt embarrassed.

"Secret service will have the necessary papers for you to sign."

"Yes." Suddenly, Norman Muller felt proud. It was on him now in full strength. He was proud.

In this imperfect world, the sovereign citizens of the first and greatest Electronic Democracy had, through Norman Muller (through *him*!), exercised once again its free, untrammeled franchise.

THE LAST QUESTION

The last question was asked for the first time, half in jest, on May 21, 2061, at a time when humanity first stepped into the light. The question came about as a result of a five-dollar bet over highballs, and it happened this way:

Alexander Adell and Bertram Lupov were two of the faithful attendants of Multivac. As well as any human beings could, they knew what lay behind the cold, clicking, flashing face—miles and miles of face—of that giant computer. They had at least a vague notion of the general plan of relays and circuits that had long since grown past the point where any single human could possibly have a firm grasp of the whole.

Multivac was self-adjusting and self-correcting. It had to be, for nothing human could adjust and correct it quickly enough or even adequately enough.—So Adell and Lupov attended the monstrous giant only lightly and superficially, yet as well as any men could. Thy fed it data, adjusted questions to its needs and translated the answers that were issued. Certainly they, and all others like them, were fully entitled to share in the glory that was Multivac's.

For decades, Multivac had helped design the ships and plot the trajectories that enabled man to reach the Moon, Mars, and Venus, but past that, Earth's poor resources

could not support the ships. Too much energy was needed for the long trips. Earth exploited its coal and uranium with increasing efficiency, but there was only so much of both.

But slowly Multivac learned enough to answer deeper questions more fundamentally, and on May 14, 2061, what had been theory, became fact.

The energy of the sun was stored, converted, and utilized directly on a planet-wide scale. All Earth turned off its burning coal, its fissioning uranium, and flipped the switch that connected all of it to a small station, one mile in diameter, circling the Earth at half the distance of the Moon. All Earth ran by invisible beams of sunpower.

Seven days had not sufficed to dim the glory of it and Adell and Lupov finally managed to escape from the public functions, and to meet in quiet where no one would think of looking for them, in the deserted underground chambers, where portions of the mighty buried body of Multivac showed. Unattended, idling, sorting data with contented lazy clickings, Multivac, too, had earned its vacation and the boys appreciated that. They had no intention, originally, of disturbing it.

They had brought a bottle with them, and their only concern at the moment was to relax in the company of each other and the bottle.

"It's amazing when you think of it," said Adell. His broad face had lines of weariness in it, and he stirred his drink slowly with a glass rod, watching the cubes of ice slur clumsily about. "All the energy we can possibly ever use for free. Enough energy, if we wanted to draw on it, to melt all Earth into a big drop of impure liquid iron, and still never miss the energy so used. All the energy we could ever use, forever and forever and forever."

Lupov cocked his head sideways. He had a trick of doing that when he wanted to be contrary, and he wanted to be contrary now, partly because he had had to carry the ice and glassware. "Not forever," he said.

"Oh, hell, just about forever. Till the sun runs down, Bert."

"That's not forever."

"All right, then. Billions and billions of years. Ten billion, maybe. Are you satisfied?"

Lupov put his fingers through his thinning hair as though to reassure himself that some was still left and sipped gently at his own drink. "Ten billion years isn't forever."

"Well, it will last our time, won't it?"

"So would the coal and uranium."

"All right, but now we can hook up each individual spaceship to the Solar Station, and it can go to Pluto and back a million times without ever worrying about fuel. You can't do *that* on coal and uranium. Ask Multivac, if you don't believe me."

"I don't have to ask Multivac. I know that."

"Then stop running down what Multivac's done for us," said Adell, blazing up, "It did all right."

"Who says it didn't? What I say is that a sun won't last forever. That's all I'm saying. We're safe for ten billion years, but then what?" Lupov pointed a slightly shaky finger at the other. "And don't say we'll switch to another sun."

There was a silence for a while. Adell put his glass to his lips only occasionally, and Lupov's eyes slowly closed. They rested.

Then Lupov's eyes snapped open. "You're thinking we'll switch to another sun when ours is done, aren't you?"

"I'm not thinking."

"Sure you are. You're weak on logic, that's the trouble with you. You're like the guy in the story who was caught in a sudden shower and who ran to a grove of trees and got under one. He wasn't worried, you see, because he figured when one tree got wet through, he would just get under another one."

"I get it," said Adell. "Don't shout. When the sun is done, the other stars will be gone, too."

"Darn right they will," muttered Lupov. "It all had a beginning in the original cosmic explosion, whatever that was, and it'll all have an end when all the stars run down. Some run down faster than others. Hell, the giants won't last a hundred million years. The sun will last ten billion years and maybe the dwarfs will last two hundred billion for all the good they are. But just give me a trillion years and everything will be dark. Entropy has to increase to maximum, that's all."

"I know all about entropy," said Adell, standing on his dignity.

"The hell you do."

"I know as much as you do."

"Then you know everything's got to run down someday."

"All right. Who says they won't?"

"You did, you poor sap. You said we had all the energy we needed, forever. You said 'forever,'"

It was Adell's turn to be contrary. "Maybe we can build things up again someday," he said.

"Never."

"Why not? Someday."

"Never."

"Ask Multivac."

"*You* ask Multivac. I dare you. Five dollars says it can't be done."

Adell was just drunk enough to try, just sober enough to be able to phrase the necessary symbols and operations into a question which, in words, might have corresponded to this: Will mankind one day without the net expenditure of energy be able to restore the sun to its full youthfulness even after it had died of old age?

Or maybe it could be put more simply like this: How can the net amount of entropy of the universe be massively decreased?

Multivac fell dead and silent. The slow flashing of lights ceased, the distant sounds of clicking relays ended.

Then, just as the frightened technicians felt they could

hold their breath no longer, there was a sudden springing of life of the teletype attached to that portion of Multivac. Five words were printed: INSUFFICIENT DATA FOR MEANINGFUL ANSWER.

"No bet," whispered Lupov. They left hurriedly.

By next morning, the two, plagued with throbbing head and cottony mouth, had forgotten the incident.

Jerrodd, Jerrodine, and Jerrodette I and II watched the starry picture in the visiplate change as the passage through hyperspace was completed in its non-time lapse. At once, the even powdering of stars gave way to the predominance of a single bright shining disk, the size of a marble, centered on the viewing-screen.

"That's X-23," said Jerrodd confidently. His thin hands clamped tightly behind his back and the knuckles whitened.

The little Jerrodettes, both girls, had experienced the hyperspace passage for the first time in their lives and were self-conscious over the momentary sensation of inside-outness. They buried their giggles and chased one another wildly about their mother, screaming, "We've reached X-23—we've reached X-23—we've—"

"Quiet, children," said Jerrodine sharply. "Are you sure, Jerrodd?"

"What is there to be but sure?" asked Jerrodd, glancing up at the bulge of featureless metal just under the ceiling. It ran the length of the room, disappearing through the wall at either end. It was as long as the ship.

Jerrodd scarcely knew a thing about the thick rod of metal except that it was called a Microvac, that one asked it questions if one wished; that if one did not it still had its task of guiding the ship to a preordered destination; of feeding on energies from the various Sub-galactic Power Stations; of computing the equations for the hyperspatial jumps.

Jerrodd and his family had only to wait and live in the comfortable residence quarters of the ship.

Someone had once told Jerrodd that the "ac" at the end of

"Microvac" stood for "automatic computer" in ancient English, but he was on the edge of forgetting even that.

Jerrodine's eyes were moist as she watched the visiplate. "I can't help it. I feel funny about leaving Earth."

"Why, for Pete's sake?" demanded Jerrodd. "We had nothing there. We'll have everything on X-23. You won't be alone. You won't be a pioneer. There are over a million people on the planet already. Good Lord, our great-grandchildren will be looking for new worlds because X-23 will be overcrowded." Then, after a reflective pause, "I tell you, it's a lucky thing the computers worked out interstellar travel the way the race is growing."

"I know, I know," said Jerrodine miserably.

Jerrodette I said promptly, "Our Microvac is the best Microvac in the world."

"I think so, too," said Jerrodd, tousling her hair.

It *was* a nice feeling to have a Microvac of your own and Jerrodd was glad he was part of his generation and no other. In his father's youth, the only computers had been tremendous machines taking up a hundred square miles of land. There was only one to a planet. Planetary ACs they were called. They had been growing in size steadily for a thousand years and then, all at once, came refinement. In place of transistors, had come molecular valves so that even the largest Planetary AC could be put into a space only half of the volume of a spaceship.

Jerrodd felt uplifted, as he always did when he thought that his own personal Microvac was many times more complicated than the ancient and primitive Multivac that had first tamed the Sun, and almost as complicated as Earth's Planetary AC (the largest) that had first solved the problem of hyperspatial travel and had made trips to the stars possible.

"So many stars, so many planets," sighed Jerrodine, busy with her own thoughts. "I suppose families will be going out to new planets forever, the way we are now."

"Not forever," said Jerrodd, with a smile. "It will stop

someday, but not for billions of years. Many billions. Even the stars run down, you know. Entropy must increase."

"What's entropy, daddy?" shrilled Jerrodette II.

"Entropy, little sweet, is just a word which means the amount of running-down of the universe. Everything runs down, you know, like your little walkie-talkie robot, remember?"

"Can't you just put in a new power-unit, like with my robot?"

"The stars *are* the power-units, dear. Once they're gone, there are no more power-units."

Jerrodette I at once set up a howl. "Don't let them, daddy. Don't let the stars run down."

"Now look what you've done," whispered Jerrodine, exasperated.

"How was I to know it would frighten them?" Jerrodd whispered back.

"Ask the Microvac," wailed Jerrodette I. "Ask him how to turn the stars on again."

"Go ahead," said Jerrodine. "It will quiet them down." (Jerrodette II was beginning to cry, also.)

Jerrodd shrugged. "Now, now, honeys. I'll ask Microvac. Don't worry, he'll tell us."

He asked the Microvac, adding quickly, "Print the answer."

Jerrodd cupped the strip of thin cellufilm and said cheerfully, "See now, the Microvac says it will take care of everything when the time comes so don't worry."

Jerrodine said, "And now, children, it's time for bed. We'll be in our new home soon."

Jerrodd read the words on the cellufilm again before destroying it: INSUFFICIENT DATA FOR MEANINGFUL ANSWER.

He shrugged and looked at the visiplate. X-23 was just ahead.

VJ-23X of Lameth stared into the black depths of the three-dimensional, small-scale map of the Galaxy and said,

"Are we ridiculous, I wonder, in being so concerned about the matter?"

MQ-17J of Nicron shook his head. "I think not. You know the Galaxy will be filled in five years at the present rate of expansion."

Both seemed in their early twenties, both were tall and perfectly formed.

"Still," said VJ-23X, "I hesitate to submit a pessimistic report to the Galactic Council."

"I wouldn't consider any other kind of report. Stir them up a bit. We've got to stir them up."

VJ-23X sighed. "Space is infinite. A hundred billion Galaxies are there for the taking. More."

"A hundred billion is *not* infinite and it's getting less infinite all the time. Consider! Twenty thousand years ago, mankind first solved the problem of utilizing stellar energy, and a few centuries later, interstellar travel became possible. It took mankind a million years to fill one small world and then only fifteen thousand years to fill the rest of the Galaxy. Now the population doubles every ten years—"

VJ-23X interrupted. "We can thank immortality for that."

"Very well. Immortality exists and we have to take it into account. I admit it has its seamy side, this immortality. The Galactic AC has solved many problems for us, but in solving the problem of preventing old age and death, it has undone all its other solutions."

"Yet you wouldn't want to abandon life, I suppose."

"Not at all," snapped MQ-17J, softening it at once to, "Not yet. I'm by no means old enough. How old are you?"

"Two hundred twenty-three. And you?"

"I'm still under two hundred.—But to get back to my point. Population doubles every ten years. Once this Galaxy is filled, we'll have filled another in ten years. Another ten years and we'll have filled two more. Another decade, four more. In a hundred years, we'll have filled a thousand

Galaxies. In a thousand years, a million Galaxies. In ten thousand years, the entire known Universe. Then what?"

VJ-23X said, "As a side issue, there's a problem of transportation. I wonder how many sunpower units it will take to move Galaxies of individuals from one Galaxy to the next."

"A very good point. Already, mankind consumes two sunpower units per year."

"Most of it's wasted. After all, our own Galaxy alone pours out a thousand sunpower units a year and we only use two of those."

"Granted, but even with a hundred per cent efficiency, we only stave off the end. Our energy requirements are going up in a geometric progression even faster than our population. We'll run out of energy even sooner than we run out of Galaxies. A good point. A very good point."

"We'll just have to build new stars out of interstellar gas."

"Or out of dissipated heat?" asked MQ-17J, sarcastically.

"There may be some way to reverse entropy. We ought to ask the Galactic AC."

VJ-23X was not really serious, but MQ-17J pulled out his AC-contact from his pocket and placed it on the table before him.

"I've half a mind to," he said. "It's something the human race will have to face someday."

He stared somberly at his small AC-contact. It was only two inches cubed and nothing in itself, but it was connected through hyperspace with the great Galactic AC that served all mankind. Hyperspace considered, it was an integral part of the Galactic AC.

MQ-17J paused to wonder if someday in his immortal life he would get to see the Galactic AC. It was on a little world of its own, a spider webbing of force-beams holding the matter within which surges of submesons took the place of the old clumsy molecular valves. Yet despite its sub-etheric

workings, the Galactic AC was known to be a full thousand feet across.

MQ-17J asked suddenly of his AC-contact, "Can entropy ever be reversed?"

VJ-23X looked startled and said at once, "Oh, say, I didn't really mean to have you ask that."

"Why not?"

"We both know entropy can't be reversed. You can't turn smoke and ash back into a tree."

"Do you have trees on your world?" asked MQ-17J.

The sound of the Galactic AC startled them into silence. Its voice came thin and beautiful out of the small AC-contact on the desk. It said: THERE IS INSUFFICIENT DATA FOR A MEANINGFUL ANSWER.

VJ-23X said, "See!"

The two men thereupon returned to the question of the report they were to make to the Galactic Council.

Zee Prime's mind spanned the new Galaxy with a faint interest in the countless twists of stars that powdered it. He had never seen this one before. Would he ever see them all? So many of them, each with its load of humanity.—But a load that was almost a dead weight. More and more, the real essence of men was to be found out here, in space.

Minds, not bodies! The immortal bodies remained back on the planets, in suspension over the eons. Sometimes they roused for material activity but that was growing rarer. Few new individuals were coming into existence to join the incredibly mighty throng, but what matter? There was little room in the Universe for new individuals.

Zee Prime was roused out of his reverie upon coming across the wispy tendrils of another mind.

"I am Zee Prime," said Zee Prime. "And you?"

"I am Dee Sub Wun. Your Galaxy?"

"We call it only the Galaxy. And you?"

"We call ours the same. All men call their Galaxy their Galaxy and nothing more. Why not?"

"True. Since all Galaxies are the same."

"Not all Galaxies. On one particular Galaxy the race of man must have originated. That makes it different."

Zee Prime said, "On which one?"

"I cannot say. The Universal AC would know."

"Shall we ask him? I am suddenly curious."

Zee Prime's perceptions broadened until the Galaxies themselves shrank and became a new, more diffuse powdering on a much larger background. So many hundreds of billions of them, all with their immortal beings, all carrying their load of intelligences with minds that drifted freely through space. And yet one of them was unique among them all in being the original Galaxy. One of them had, in its vague and distant past, a period when it was the only Galaxy populated by man.

Zee Prime was consumed with curiosity to see this Galaxy and he called out: "Universal AC! On which Galaxy did mankind originate?"

The Universal AC heard, for on every world and throughout space, it had its receptors ready, and each receptor lead through hyperspace to some unknown point where the Universal AC kept itself aloof.

Zee Prime knew of only one man whose thoughts had penetrated within sensing distance of Universal AC, and he reported only a shining globe, two feet across, difficult to see.

"But how can that be all of Universal AC?" Zee Prime had asked.

"Most of it," had been the answer, "is in hyperspace. In what form it is there I cannot imagine."

Nor could anyone, for the day had long since passed, Zee Prime knew, when any man had any part of the making of a Universal AC. Each Universal AC designed and constructed its successor. Each, during its existence of a million years or more accumulated the necessary data to build a better and more intricate, more capable successor in which its own store of data and individuality would be submerged.

The Universal AC interrupted Zee Prime's wandering thoughts, not with words, but with guidance. Zee Prime's mentality was guided into the dim sea of Galaxies and one in particular enlarged into stars.

A thought came, infinitely distant, but infinitely clear. "THIS IS THE ORIGINAL GALAXY OF MAN."

But it was the same after all, the same as any other, and Zee Prime stifled his disappointment.

Dee Sub Wun, whose mind had accompanied the other, said suddenly, "And is one of these stars the original star of Man?"

The Universal AC said, "MAN'S ORIGINAL STAR HAS GONE NOVA. IT IS A WHITE DWARF."

"Did the men upon it die?" asked Zee Prime, startled and without thinking.

The Universal AC said, "A NEW WORLD, AS IN SUCH CASES WAS CONSTRUCTED FOR THEIR PHYSICAL BODIES IN TIME."

"Yes, of course," said Zee Prime, but a sense of loss overwhelmed him even so. His mind released its hold on the original Galaxy of Man, let it spring back and lose itself among the blurred pin points. He never wanted to see it again.

Dee Sub Wun said, "What is wrong?"

"The stars are dying. The original star is dead."

"They must all die. Why not?"

"But when all energy is gone, our bodies will finally die, and you and I with them."

"It will take billions of years."

"I do not wish it to happen even after billions of years. Universal AC! How may stars be kept from dying?"

Dee Sub Wun said in amusement. "You're asking how entropy might be reversed in direction."

And the Universal AC answered: "THERE IS AS YET INSUFFICIENT DATA FOR A MEANINGFUL ANSWER."

Zee Prime's thoughts fled back to his own Galaxy. He

gave no further thought to Dee Sub Wun, whose body might be waiting on a galaxy a trillion light-years away, or on the star next to Zee Prime's own. It didn't matter.

Unhappily, Zee Prime began collecting interstellar hydrogen out of which to build a small star of his own. If the stars must someday die, at least some could yet be built.

Man considered with himself, for in a way, Man, mentally, was one. He consisted of a trillion, trillion, trillion ageless bodies, each in its place, each resting quiet and incorruptible, each cared for by perfect automatons, equally incorruptible, while the minds of all the bodies freely melted one into the other, indistinguishable.

Man said, "The Universe is dying."

Man looked about at the dimming Galaxies. The giant stars, spendthrifts, were gone long ago, back in the dimmest of the dim far past. Almost all stars were white dwarfs, fading to the end.

New stars had been built of the dust between the stars, some by natural processes, some by Man himself, and those were going, too. White dwarfs might yet be crashed together and of the mighty forces so released, new stars built, but only one star for every thousand white dwarfs destroyed, and those would come to an end, too.

Man said, "Carefully husbanded, as directed by the Cosmic AC, the energy that is even yet left in all the Universe will last for billions of years."

"But even so," said Man, "eventually it will all come to an end. However it may be husbanded, however stretched out, the energy once expended is gone and cannot be restored. Entropy must increase forever to the maximum."

Man said, "Can entropy not be reversed? Let us ask the Cosmic AC."

The Cosmic AC surrounded them but not in space. Not a fragment of it was in space. It was in hyperspace and made of something that was neither matter nor energy. The

question of its size and nature no longer had meaning in any terms that Man could comprehend.

"Cosmic AC," said Man, "how may entropy be reversed?"

The Cosmic AC said, "THERE IS AS YET INSUFFICIENT DATA FOR A MEANINGFUL ANSWER."

Man said, "Collect additional data."

The Cosmic AC said, "I WILL DO SO. I HAVE BEEN DOING SO FOR A HUNDRED BILLION YEARS. MY PREDECESSORS AND I HAVE BEEN ASKED THIS QUESTION MANY TIMES. ALL THE DATA I HAVE REMAINS INSUFFICIENT."

"Will there come a time," said Man, "when data will be sufficient or is the problem insoluble in all conceivable circumstances?"

The Cosmic AC said, "NO PROBLEM IS INSOLUBLE IN ALL CONCEIVABLE CIRCUMSTANCES."

Man said, "When will you have enough data to answer the question?"

The Cosmic AC said, "THERE IS AS YET INSUFFICIENT DATA FOR A MEANINGFUL ANSWER."

"Will you keep working on it?" asked Man.

The Cosmic AC said, "I WILL."

Man said, "We shall wait."

The stars and Galaxies died and snuffed out, and space grew black after ten trillion years of running down.

One by one Man fused with AC, each physical body losing its mental identity in a manner that was somehow not a loss but a gain.

Man's last mind paused before fusion, looking over a space that included nothing but the dregs of one last dark star and nothing besides but incredibly thin matter, agitated randomly by the tag ends of heat wearing out, asymptotically, to the absolute zero.

Man said, "AC, is this the end? Can this chaos not be reversed into the Universe once more? Can that not be done?"

AC said, "THERE IS YET INSUFFICIENT DATA FOR A MEANINGFUL ANSWER."

Man's last mind fused and only AC existed—and that in hyperspace.

Matter and energy had ended and with it space and time. Even AC existed only for the sake of the one last question that it had never answered from the time a half-drunken computer ten trillion years before had asked the question of a computer that was to AC far less than was a man to Man.

All other questions had been answered, and until this last question was answered also, AC might not release his consciousness.

All collected data had come to a final end. Nothing was left to be collected.

But all collected data had yet to be completely correlated and put together in all possible relationships.

A timeless interval was spent in doing that.

And it came to pass that AC learned how to reverse the direction of entropy.

But there was now no man to whom AC might give the answer of the last question. No matter. The answer—by demonstration—would take care of that, too.

For another timeless interval, AC thought how best to do this. Carefully, AC organized the program.

The consciousness of AC encompassed all of what had once been a Universe and brooded over what was now Chaos. Step by step, it must be done.

And AC said, "LET THERE BE LIGHT!"

And there was light—

PROFESSION

George Platen could not conceal the longing in his voice. It was too much to suppress. He said, "Tomorrow's the first of May. Olympics!"

He rolled over on his stomach and peered over the foot of his bed at his roommate. Didn't *he* feel it, too? Didn't *this* make some impression on him?

George's face was thin and had grown a trifle thinner in the nearly year and a half that he had been at the House. His figure was slight but the look in his blue eyes was as intense as it had ever been, and right now there was a trapped look in the way his fingers curled against the bedspread.

George's roommate looked up briefly from his book and took the opportunity to adjust the light-level of the stretch of wall near his chair. His name was Hali Omani and he was a Nigerian by birth. His dark brown skin and massive features seemed made for calmness, and mention of the Olympics did not move him.

He said, "I know, George."

George owed much to Hali's patience and kindness when it was needed, but even patience and kindness could be overdone. Was this a time to sit there like a statue built of some dark, warm wood?

George wondered if he himself would grow like that after ten years here and rejected the thought violently. No!

He said defiantly, "I think you've forgotten what May means."

The other said, "I remember very well what it means. It means nothing! You're the one who's forgotten that. May means nothing to you, George Platen, and," he added softly, "it means nothing to me, Hali Omani."

George said, "The ships are coming in for recruits. By June, thousands and thousands will leave with millions of men and women heading for any world you can name, and all that means nothing?"

"Less than nothing. What do you want me to do about it, anyway?" Omani ran his finger along a difficult passage in the book he was reading and his lips moved soundlessly.

George watched him. Damn it, he thought, yell, scream; you can do that much. Kick at me, do anything.

It was only that he wanted not to be so alone in his anger. He wanted not to be the only one so filled with resentment, not to be the only one dying a slow death.

It was better those first weeks when the Universe was a small shell of vague light and sound pressing down upon him. It was better before Omani had wavered into view and dragged him back to a life that wasn't worth living.

Omani! He was old! He was at least thirty. George thought: Will I be like that at thirty? Will I be like that in twelve years?

And because he was afraid he might be, he yelled at Omani, "Will you stop reading that fool book?"

Omani turned a page and read on a few words, then lifted his head with its skullcap of crisply curled hair and said, "What?"

"What good does it do you to read the book?" He stepped forward, snorted "More electronics," and slapped it out of Omani's hands.

Omani got up slowly and picked up the book. He smoothed a crumpled page without visible rancor. "Call it the satisfaction of curiosity," he said. "I understand a little

of it today, perhaps a little more tomorrow. That's a victory in a way."

"A victory. What kind of a victory? Is that what satisfies you in life? To get to know enough to be a quarter of a Registered Electronician by the time you're sixty-five?"

"Perhaps by the time I'm thirty-five."

"And then who'll want you? Who'll use you? Where will you go?"

"No one. No one. Nowhere. I'll stay here and read other books."

"And that satisfies you? Tell me! You've dragged me to class. You've got me to reading and memorizing, too. For what? There's nothing in it that satisfies me."

"What good will it do you to deny yourself satisfaction?"

"It means I'll quit the whole farce. I'll do as I planned to do in the beginning before you dovey-lovied me out of it. I'm going to force them to—to—"

Omani put down his book. He let the other run down and then said, "To what, George?"

"To correct a miscarriage of justice. A frame-up. I'll get that Antonelli and force him to admit he—he—"

Omani shook his head. "Everyone who comes here insists it's a mistake. I thought you'd passed that stage."

"Don't call it a stage," said George violently. "In my case, it's a fact. I've told you—"

"You've told me, but in your heart you know no one made any mistake as far as you were concerned."

"Because no one will admit it? You think any of them would admit a mistake unless they were forced to? —Well, I'll force them."

It was May that was doing this to George; it was Olympics month. He felt it bring the old wildness back and he couldn't stop it. He didn't want to stop it. He had been in danger of forgetting.

He said, "I was going to be a Computer Programmer and I *can* be one. I could be one today, regardless of what they

say analysis shows." He pounded his mattress. "They're wrong. They *must* be."

"The analysts are never wrong."

"They *must* be. Do you doubt my intelligence?"

"Intelligence hasn't one thing to do with it. Haven't you been told that often enough? Can't you understand that?"

George rolled away, lay on his back, and stared somberly at the ceiling.

"What did you want to be, Hali?"

"I had no fixed plans. Hydroponicist would have suited me, I suppose."

"Did you think you could make it?"

"I wasn't sure."

George had never asked personal questions of Omani before. It struck him as queer, almost unnatural, that other people had had ambitions and ended here. Hydroponicist!

He said, "Did you think you'd make *this*?"

"No, but here I am just the same."

"And you're satisfied. Really, really satisfied. You're happy. You love it. You wouldn't be anywhere else."

Slowly, Omani got to his feet. Carefully, he began to unmake his bed. He said, "George, you're a hard case. You're knocking yourself out because you won't accept the facts about yourself. George, you're here in what you call the House, but I've never heard you give it its full title. Say it, George, say it. Then go to bed and sleep this off."

George gritted his teeth and showed them. He choked out, "No!"

"Then I will," said Omani, and he did. He shaped each syllable carefully.

George was bitterly ashamed at the sound of it. He turned his head away.

For most of the first eighteen years of his life, George Platen had headed firmly in one direction, that of Registered Computer Programmer. There were those in his crowd who spoke wisely of Spationautics, Refrigeration Technology,

Transportation Control, and even Administration. But George held firm.

He argued relative merits as vigorously as any of them, and why not? Education Day loomed ahead of them and was the great fact of their existence. It approached steadily, as fixed and certain as the calendar—the first day of November of the year following one's eighteenth birthday.

After that day, there were other topics of conversation. One could discuss with others some detail of the profession, or the virtue of one's wife and children, or the fate of one's space-polo team, or one's experiences in the Olympics. Before Education Day, however, there was only one topic that unfailingly and unwearyingly held everyone's interest, and that was Education Day.

"What are you going for? Think you'll make it? Heck, that's no good. Look at the records; quota's been cut. Logistics now—"

Or Hypermechanics now—Or Communications now—Or Gravitics now—

Especially Gravitics at the moment. Everyone had been talking about Gravitics in the few years just before George's Education Day because of the development of the Gravitic power engine.

Any world within ten light-years of a dwarf star, everyone said, would give its eyeteeth for any kind of Registered Gravitics Engineer.

The thought of that never bothered George. Sure it would; all the eyeteeth it could scare up. But George had also heard what had happened before in a newly developed technique. Rationalization and simplification followed in a flood. New models each year; new types of gravitic engines; new principles. Then all those eyeteeth gentlemen would find themselves out of date and superseded by later models with later educations. The first group would then have to settle down to unskilled labor or ship out to some backwoods world that wasn't quite caught up yet.

Now Computer Programmers were in steady demand

year after year, century after century. The demand never reached wild peaks; there was never a howling bull market for Programmers; but the demand climbed steadily as new worlds opened up and as older worlds grew more complex.

He had argued with Stubby Trevelyan about that constantly. As best friends, their arguments had to be constant and vitriolic and, of course, neither ever persuaded or was persuaded.

But then Trevelyan had had a father who was a Registered Metallurgist and had actually served on one of the Outworlds, and a grandfather who had also been a Registered Metallurgist. He himself was intent on becoming a Registered Metallurgist almost as a matter of family right and was firmly convinced that any other profession was a shade less than respectable.

"There'll always be metal," he said, "and there's an accomplishment in molding alloys to specification and watching structures grow. Now what's a Programmer going to be doing. Sitting at a coder all day long, feeding some fool mile-long machine."

Even at sixteen, George had learned to be practical. He said simply, "There'll be a million Metallurgists put out along with you."

"Because it's good. A good profession. The best."

"But you get crowded out, Stubby. You can be way back in line. Any world can tape out its own Metallurgists, and the market for advanced Earth models isn't so big. And it's mostly the small worlds that want them. You know what per cent of the turnout of Registered Metallurgists get tabbed for worlds with a Grade A rating. I looked it up. It's just 13.3 per cent. That means you'll have seven chances in eight of being stuck in some world that just about has running water. You may even be stuck on Earth; 2.3 per cent are."

Trevelyan said belligerently, "There's no disgrace in staying on Earth. Earth needs technicians, too. Good ones." His grandfather had been an Earth-bound Metallurgist, and

Trevelyan lifted his finger to his upper lip and dabbed at an as yet nonexistent mustache.

George knew about Trevelyan's grandfather and, considering the Earth-bound position of his own ancestry, was in no mood to sneer. He said diplomatically, "No intellectual disgrace. Of course not. But it's nice to get into a Grade A world, isn't it?

"Now you take Programmers. Only the Grade A worlds have the kind of computers that really need first-class Programmers so they're the only ones in the market. And Programmer tapes are complicated and hardly anyone fits. They need more Programmers than their own population can supply. It's just a matter of statistics. There's one first-class Programmer per million, say. A world needs twenty and has a population of ten million, they have to come to Earth for five to fifteen Programmers. Right?

"And you know how many Registered Computer Programmers went to Grade A planets last year? I'll tell you. Every last one. If you're a Programmer, you're a picked man. Yes, sir."

Trevelyan frowned. "If only one in a million makes it, what makes you think *you'll* make it?"

George said guardedly, "I'll make it."

He never dared tell anyone; not Trevelyan; not his parents; of exactly what he was doing that made him so confident. But he wasn't worried. He was simply confident (that was the worst of the memories he had in the hopeless days afterward). He was as blandly confident as the average eight-year-old kid approaching Reading Day—that childhood preview of Education Day.

Of course, Reading Day had been different. Partly, there was the simple fact of childhood. A boy of eight takes many extraordinary things in stride. One day you can't read and the next day you can. That's just the way things are. Like the sun shining.

And then not so much depended upon it. There were no

recruiters just ahead, waiting and jostling for the lists and scores on the coming Olympics. A boy or girl who goes through the Reading Day is just someone who has ten more years of undifferentiated living upon Earth's crawling surface; just someone who returns to his family with one new ability.

By the time Education Day came, ten years later, George wasn't even sure of most of the details of his own Reading Day.

Most clearly of all, he remembered it to be a dismal September day with a mild rain falling. (September for Reading Day; November for Education Day; May for Olympics. They made nursery rhymes out of it.) George had dressed by the wall lights, with his parents far more excited than he himself was. His father was a Registered Pipe Fitter and had found his occupation on Earth. This fact had always been a humiliation to him, although, of course, as anyone could see plainly, most of each generation must stay on Earth in the nature of things.

There had to be farmers and miners and even technicians on Earth. It was only the late-model, high-specialty professions that were in demand on the Outworlds, and only a few millions a year out of Earth's eight billion population could be exported. Every man and woman on Earth couldn't be among that group.

But every man and woman could hope that at least one of his children could be one, and Platen, Senior, was certainly no exception. It was obvious to him (and, to be sure, to others as well) that George was notably intelligent and quick-minded. He would be bound to do well and he would have to, as he was an only child. If George didn't end on an Outworld, they would have to wait for grandchildren before a next chance would come along, and that was too far in the future to be much consolation.

Reading Day would not prove much, of course, but it would be the only indication they would have before the big day itself. Every parent on Earth would be listening to the

quality of reading when his child came home with it; listening for any particularly easy flow of words and building that into certain omens of the future. There were few families that didn't have at least one hopeful who, from Reading Day on, was the great hope because of the way he handled his trisyllabics.

Dimly, George was aware of the cause of his parents' tension, and if there was any anxiety in his young heart that drizzly morning, it was only the fear that his father's hopeful expression might fade out when he returned home with his reading.

The children met in the large assembly room of the town's Education hall. All over Earth, in millions of local halls, throughout that month, similar groups of children would be meeting. George felt depressed by the grayness of the room and by the other children, strained and stiff in unaccustomed finery.

Automatically, George did as all the rest of the children did. He found the small clique that represented the children on his floor of the apartment house and joined them.

Trevelyan, who lived immediately next door, still wore his hair childishly long and was years removed from the sideburns and thin, reddish mustache that he was to grow as soon as he was physiologically capable of it.

Trevelyan (to whom George was then known as Jaw-jee) said, "Bet you're scared."

"I am not," said George. Then, confidentially, "My folks got a hunk of printing up on the dresser in my room, and when I come home, I'm going to read it for them." (George's main suffering at the moment lay in the fact that he didn't quite know where to put his hands. He had been warned not to scratch his head or rub his ears or pick his nose or put his hands into his pockets. This eliminated almost every possibility.)

Trevelyan put *his* hands in his pockets and said, "My father isn't worried."

Trevelyan, Senior, had been a Metallurgist on Diporia for

nearly seven years, which gave him a superior social status in his neighborhood even though he had retired and returned to Earth.

Earth discouraged these re-immigrants because of population problems, but a small trickle did return. For one thing the cost of living was lower on Earth, and what was a trifling annuity on Diporia, say, was a comfortable income on Earth. Besides, there were always men who found more satisfaction in displaying their success before the friends and scenes of their childhood than before all the rest of the Universe besides.

Trevelyan, Senior, further explained that if he stayed on Diporia, so would his children, and Diporia was a one-spaceship world. Back on Earth, his kids could end anywhere, even Novia.

Stubby Trevelyan had picked up that item early. Even before Reading Day, his conversation was based on the carelessly assumed fact that his ultimate home would be in Novia.

George, oppressed by thoughts of the other's future greatness and his own small-time contrast, was driven to belligerent defense at once.

"My father isn't worried either. He just wants to hear me read because he knows I'll be good. I suppose your father would just as soon not hear you because he knows you'll be all wrong."

"I will not be all wrong. Reading is *nothing*. On Novia, I'll *hire* people to read to me."

"Because *you* won't be able to read yourself, on account of you're *dumb*!"

"Then how come I'll be on Novia?"

And George, driven, made the great denial, "Who says you'll be on Novia? Bet you don't go anywhere."

Stubby Trevelyan reddened. "I won't be a Pipe Fitter like your old man."

"Take that back, you dumbhead."

"You take *that* back."

They stood nose to nose, not wanting to fight but relieved at having something familiar to do in this strange place. Furthermore, now that George had curled his hands into fists and lifted them before his face, the problem of what to do with his hands was, at least temporarily, solved. Other children gathered round excitedly.

But then it all ended when a woman's voice sounded loudly over the public address system. There was instant silence everywhere. George dropped his fists and forgot Trevelyan.

"Children," said the voice, "we are going to call out your names. As each child is called, he or she is to go to one of the men waiting along the side walls. Do you see them? They are wearing red uniforms so they will be easy to find. The girls will go to the right. The boys will go to the left. Now look about and see which man in red is nearest to you—"

George found his man at a glance and waited for his name to be called off. He had not been introduced before this to the sophistications of the alphabet, and the length of time it took to reach his own name grew disturbing.

The crowd of children thinned; little rivulets made their way to each of the red-clad guides.

When the name "George Platen" was finally called, his sense of relief was exceeded only by the feeling of pure gladness at the fact that Stubby Trevelyan still stood in his place, uncalled.

George shouted back over his shoulder as he left, "Yay, Stubby, maybe they don't want you."

That moment of gaiety quickly left. He was herded into a line and directed down corridors in the company of strange children. They all looked at one another, large-eyed and concerned, but beyond a snuffling, "Quitcher pushing," and "Hey, watch out" there was no conversation.

They were handed little slips of paper which they were told must remain with them. George stared at his curiously. Little black marks of different shapes. He knew it to be

printing but how could anyone make words out of it? He couldn't imagine.

He was told to strip; he and four other boys who were all that now remained together. All the new clothes came shucking off and four eight-year-olds stood naked and small, shivering more out of embarrassment than cold. Medical technicians came past, probing them, testing them with odd instruments, pricking them for blood. Each took the little cards and made additional marks on them with little black rods that produced the marks, all neatly lined up, with great speed. George stared at the new marks, but they were no more comprehensible than the old. The children were ordered back into their clothes.

They sat on separate little chairs then and waited again. Names were called again and "George Platen" came third.

He moved into a large room, filled with frightening instruments with knobs and glassy panels in front. There was a desk in the very center, and behind it a man sat, his eyes on the papers piled before him.

He said, "George Platen?"

"Yes, sir," said George, in a shaky whisper. All this waiting and all this going here and there was making him nervous. He wished it were over.

The man behind the desk said, "I am Dr. Lloyed, George. How are you?"

The doctor didn't look up as he spoke. It was as though he had said those words over and over again and didn't have to look up any more.

"I'm all right."

"Are you afraid, George?"

"N—no, sir," said George, sounding afraid even in his own ears.

"That's good," said the doctor, "because there's nothing to be afraid of, you know. Let's see, George. It says here on your card that your father is named Peter and that he's a Registered Pipe Fitter and your mother is named Amy and is a Registered Home Technician. Is that right?"

"Y—yes, sir."

"And your birthday is February 13, and you had an ear infection about a year ago. Right?"

"Yes, sir."

"Do you know how I know all these things?"

"It's on the card, I think, sir."

"That's right." The doctor looked up at George for the first time and smiled. He showed even teeth and looked much younger than George's father. Some of George's nervousness vanished.

The doctor passed the card to George. "Do you know what all those things there mean, George?"

Although George knew he did not he was startled by the sudden request into looking at the card as though he might understand now through some sudden stroke of fate. But they were just marks as before and he passed the card back. "No, sir."

"Why not?"

George felt a sudden pang of suspicion concerning the sanity of this doctor. Didn't he know why not?

George said, "I can't read, sir."

"Would you like to read?"

"Yes, sir."

"Why, George?"

George stared, appalled. No one had ever asked him that. He had no answer. He said falteringly, "I don't know, sir."

"Printed information will direct you all through your life. There is so much you'll have to know even after Education Day. Cards like this one will tell you. Books will tell you. Television screens will tell you. Printing will tell you such useful things and such interesting things that not being able to read would be as bad as not being able to see. Do you understand?"

"Yes, sir."

"Are you afraid, George?"

"No, sir."

"Good. Now I'll tell you exactly what we'll do first. I'm

going to put these wires on your forehead just over the corners of your eyes. They'll stick there but they won't hurt at all. Then, I'll turn on something that will make a buzz. It will sound funny and it may tickle you, but it won't hurt. Now if it does hurt, you tell me, and I'll turn it off right away, but it won't hurt. All right?"

George nodded and swallowed.

"Are you ready?"

George nodded. He closed his eyes while the doctor busied himself. His parents had explained this to him. They, too, had said it wouldn't hurt, but then there were always the older children. There were the ten- and twelve-year-olds who howled after the eight-year-olds waiting for Reading Day, "Watch out for the needle." There were the others who took you off in confidence and said, "They got to cut your head open. They use a sharp knife that big with a hook on it," and so on into horrifying details.

George had never believed them but he had had nightmares, and now he closed his eyes and felt pure terror.

He didn't feel the wires at his temple. The buzz was a distant thing, and there was the sound of his own blood in his ears, ringing hollowly as though it and he were in a large cave. Slowly he chanced opening his eyes.

The doctor had his back to him. From one of the instruments a strip of paper unwound and was covered with a thin, wavy purple line. The doctor tore off pieces and put them into a slot in another machine. He did it over and over again. Each time a little piece of film came out, which the doctor looked at. Finally, he turned toward George with a queer frown between his eyes.

The buzzing stopped.

George said breathlessly, "Is it over?"

The doctor said, "Yes," but he was still frowning.

"Can I read now?" asked George. He felt no different.

The doctor said, "What?" then smiled very suddenly and briefly. He said, "It works fine, George. You'll be reading in fifteen minutes. Now we're going to use another machine

this time and it will take longer. I'm going to cover your whole head, and when I turn it on you won't be able to see or hear anything for a while, but it won't hurt. Just to make sure I'm going to give you a little switch to hold in your hand. If anything hurts, you press the little button and everything shuts off. All right?"

In later years, George was told that the little switch was strictly a dummy; that it was introduced solely for confidence. He never did know for sure, however, since he never pushed the button.

A large smoothly curved helmet with a rubber inner lining was placed over his head and left there. Three or four little knobs seemed to grab at him and bit into his skull, but there was only a little pressure that faded. No pain.

The doctor's voice sounded dimly. "Everything all right, George?"

And then, with no real warning, a layer of thick felt closed down all about him. He was disembodied, there was no sensation, no universe, only himself and a distant murmur at the very ends of nothingness telling him something—telling him—telling him—

He strained to hear and understand but there was all that thick felt between.

Then the helmet was taken off his head, and the light was so bright that it hurt his eyes while the doctor's voice drummed at his ears.

The doctor said, "Here's your card, George. What does it say?"

George looked at his card again and gave out a strangled shout. The marks weren't just marks at all. They made up words. They were words just as clearly as though something were whispering them in his ears. He could *hear* them being whispered as he looked at them.

"What does it say, George?"

"It says—it says—'Platen, George. Born 13 February 6492 of Peter and Amy Platen in . . ." He broke off.

"You can read, George," said the doctor. "It's all over."

"For good? I won't forget how?"

"Of course not." The doctor leaned over to shake hands gravely. "You will be taken home now."

It was days before George got over this news and great talent of his. He read for his father with such facility that Platen, Senior, wept and called relatives to tell the good news.

George walked about town, reading every scrap of printing he could find and wondering how it was that none of it had ever made sense to him before.

He tried to remember how it was not to be able to read and couldn't. As far as his feeling about it was concerned, he had always been able to read. Always.

At eighteen, George was rather dark, of medium height, but thin enough to look taller. Trevelyan, who was scarcely an inch shorter, had a stockiness of build that made "Stubby" more than ever appropriate, but in this last year he had grown self-conscious. The nickname could no longer be used without reprisal. And since Trevelyan disapproved of his proper first name even more strongly, he was called Trevelyan or any decent variant of that. As though to prove his manhood further, he had most persistently grown a pair of sideburns and a bristly mustache.

He was sweating and nervous now, and George, who had himself grown out of "Jaw-jee" and into the curt monosyllabic gutturality of "George," was rather amused by that.

They were in the same large hall they had been in ten years before (and not since). It was as if a vague dream of the past had come to sudden reality. In the first few minutes George had been distinctly surprised at finding everything seemed smaller and more cramped than his memory told him; then he made allowance for his own growth.

The crowd was smaller than it had been in childhood. It was exclusively male this time. The girls had another day assigned them.

Trevelyan leaned over to say, "Beats me the way they make you wait."

"Red tape," said George. "You can't avoid it."

Trevelyan said, "What makes *you* so damned tolerant about it?"

"I've got nothing to worry about."

"Oh, brother, you make me sick. I hope you end up Registered Manure Spreader just so I can see your face when you do." His somber eyes swept the crowd anxiously.

George looked about, too. It wasn't quite the system they used on the children. Matters went slower, and instructions had been given out at the start in print (an advantage over the pre-Readers). The names Platen and Trevelyan were well down the alphabet still, but this time the two knew it.

Young men came out of the education rooms, frowning and uncomfortable, picked up their clothes and belongings, then went off to analysis to learn the results.

Each, as he came out, would be surrounded by a clot of the thinning crowd. "How was it?" "How'd it feel?" "Whatcha think ya made?" "Ya feel any different?"

Answers were vague and noncommittal.

George forced himself to remain out of those clots. You only raised your own blood pressure. Everyone said you stood the best chance if you remained calm. Even so, you could feel the palms of your hands grow cold. Funny that new tensions came with the years.

For instance, high-specialty professionals heading out for an Outworld were accompanied by a wife (or husband). It was important to keep the sex ratio in good balance on all worlds. And if you were going out to a Grade A world, what girl would refuse you? George had no specific girl in mind yet; he wanted none. Not now! Once he made Programmer; once he could add to his name, Registered Computer Programmer, he could take his pick, like a sultan in a harem. The thought excited him and he tried to put it away. Must stay calm.

Trevelyan muttered, "What's it all about anyway? First

they say it works best if you're relaxed and at ease. Then they put you through this and make it impossible for you to be relaxed and at ease."

"Maybe that's the idea. They're separating the boys from the men to begin with. Take it easy, Trev."

"Shut up."

George's turn came. His name was not called. It appeared in glowing letters on the notice board.

He waved at Trevelyan. "Take it easy. Don't let it get you."

He was happy as he entered the testing chamber. Actually happy.

The man behind the desk said, "George Platen?"

For a fleeting instant there was a razor-sharp picture in George's mind of another man, ten years earlier, who had asked the same question, and it was almost as though this were the same man and he, George, had turned eight again as he had stepped across the threshold.

But the man looked up and, of course, the face matched that of the sudden memory not at all. The nose was bulbous, the hair thin and stringy, and the chin wattled as though its owner had once been grossly overweight and had reduced.

The man behind the desk looked annoyed. "Well?"

George came to Earth. "I'm George Platen, sir."

"Say so, then. I'm Dr. Zachary Antonelli, and we're going to be intimately acquainted in a moment."

He stared at small strips of film, holding them up to the light owlishly.

George winced inwardly. Very hazily, he remembered the other doctor (he had forgotten the name) staring at such film. Could these be the same? The other doctor had frowned and this one was looking at him now as though he were angry.

His happiness was already just about gone.

Dr. Antonelli spread the pages of a thickish file before

him now and put the films carefully to one side. "It says here you want to be a Computer Programmer."

"Yes, doctor."

"Still do?"

"Yes, sir."

"It's a responsible and exacting position. Do you feel up to it?"

"Yes, sir."

"Most pre-Educates don't put down any specific profession. I believe they are afraid of queering it."

"I think that's right, sir."

"Aren't you afraid of that?"

"I might as well be honest, sir."

Dr. Antonelli nodded, but without any noticeable lightening of his expression. "Why do you want to be a Programmer?"

"It's a responsible and exacting position as you said, sir. It's an important job and an exciting one. I like it and I think I can do it."

Dr. Antonelli put the papers away, and looked at George sourly. He said, "How do you know you like it? Because you think you'll be snapped up by some Grade A planet?"

George thought uneasily: He's trying to rattle you. Stay calm and stay frank.

He said, "I think a Programmer has a good chance, sir, but even if I were left on Earth, I know I'd like it." (That was true enough. I'm not lying, thought George.)

"All right, how do you know?"

He asked it as though he knew there was no decent answer and George almost smiled. He had one.

He said, "I've been reading about Programming, sir."

"You've been *what*?" Now the doctor looked genuinely astonished and George took pleasure in that.

"Reading about it, sir. I bought a book on the subject and I've been studying it."

"A book for Registered Programmers?"

"Yes, sir."

"But you couldn't understand it."

"Not at first. I got other books on mathematics and electronics. I made out all I could. I still don't know much, but I know enough to know I like it and to know I can make it." (Even his parents never found that secret cache of books or knew why he spent so much time in his own room or exactly what happened to the sleep he missed.)

The doctor pulled at the loose skin under his chin. "What was your idea in doing that, son?"

"I wanted to make sure I would be interested, sir."

"Surely you know that being interested means nothing. You could be devoured by a subject and if the physical make-up of your brain makes it more efficient for you to be something else, something else you will be. You know that, don't you?"

"I've been told that," said George cautiously.

"Well, believe it. It's true."

George said nothing.

Dr. Antonelli said, "Or do you believe that studying some subject will bend the brain cells in that direction, like that other theory that a pregnant woman need only listen to great music persistently to make a composer of her child. Do you believe that?"

George flushed. That had certainly been in his mind. By forcing his intellect constantly in the desired direction, he had felt sure that he would be getting a head start. Most of his confidence had rested on exactly that point.

"I never—" he began, and found no way of finishing.

"Well, it isn't true. Good Lord, youngster, your brain pattern is fixed at birth. It can be altered by a blow hard enough to damage the cells or by a burst blood vessel or by a tumor or by a major infection—each time, of course, for the worse. But it certainly can't be affected by your thinking special thoughts." He stared at George thoughtfully, then said, "Who told you to do this?"

George, now thoroughly disturbed, swallowed and said, "No one, doctor. My own idea."

"Who knew you were doing it after you started?"

"No one. Doctor, I meant to do no wrong."

"Who said anything about wrong? Useless is what I would say. Why did you keep it to yourself?"

"I—I thought they'd laugh at me." (He thought abruptly of a recent exchange with Trevelyan. George had very cautiously broached the thought, as of something merely circulating distantly in the very outermost reaches of his mind, concerning the possibility of learning something by ladling it into the mind by hand, so to speak, in bits and pieces. Trevelyan had hooted, "George, you'll be tanning your own shoes next and weaving your own shirts." He had been thankful then for his policy of secrecy.)

Dr. Antonelli shoved the bits of film he had first looked at from position to position in morose thought. Then he said, "Let's get you analyzed. This is getting me nowhere."

The wires went to George's temples. There was the buzzing. Again there came a sharp memory of ten years ago.

George's hands were clammy; his heart pounded. He should never have told the doctor about his secret reading.

It was his damned vanity, he told himself. He had wanted to show how enterprising he was, how full of initiative. Instead, he had showed himself superstitious and ignorant and aroused the hostility of the doctor. (He could tell the doctor hated him for a wise guy on the make.)

And now he had brought himself to such a state of nervousness, he was sure the analyzer would show nothing that made sense.

He wasn't aware of the moment when the wires were removed from his temples. The sight of the doctor, staring at him thoughtfully, blinked into his consciousness and that was that; the wires were gone. George dragged himself together with a tearing effort. He had quite given up his ambition to be a Programmer. In the space of ten minutes, it had all gone.

He said dismally, "I suppose no?"

"No what?"

"No Programmer?"

The doctor rubbed his nose and said, "You get your clothes and whatever belongs to you and go to room 15-C. Your files will be waiting for you there. So will my report."

George said in complete surprise, "Have I been Educated already? I thought this was just to—"

Dr. Antonelli stared down at his desk. "It will all be explained to you. You do as I say."

George felt something like panic. What was it they couldn't tell him? He wasn't fit for anything but Registered Laborer. They were going to prepare him for that; adjust him to it.

He was suddenly certain of it and he had to keep from screaming by main force.

He stumbled back to his place of waiting. Trevelyan was not there, a fact for which he would have been thankful if he had had enough self-possession to be meaningfully aware of his surroundings. Hardly anyone was left, in fact, and the few who were looked as though they might ask him questions were it not that they were too worn out by their tail-of-the-alphabet waiting to buck the fierce, hot look of anger and hate he cast at them.

What right had *they* to be technicians and he, himself, a Laborer? Laborer! He was *certain*!

He was led by a red-uniformed guide along the busy corridors lined with separate rooms, each containing its groups, here two, there five: the Motor Mechanics, the Construction Engineers, the Agronomists— There were hundreds of specialized Professions and most of them would be represented in this small town by one or two anyway.

He hated them all just then: the Statisticians, the Accountants, the lesser breeds and the higher. He hated them because they owned their smug knowledge now, knew their

fate, while he himself, empty still, had to face some kind of further red tape.

He reached 15-C, was ushered in and left in an empty room. For one moment, his spirits bounded. Surely, if this were the Labor classification room, there would be dozens of youngsters present.

A door sucked into its recess on the other side of a waist-high partition and an elderly, white-haired man stepped out. He smiled and showed even teeth that were obviously false, but his face was still ruddy and unlined and his voice had vigor.

He said, "Good evening, George. Our own sector has only one of you this time, I see."

"Only one?" said George blankly.

"Thousands over the Earth, of course. Thousands. You're not alone."

George felt exasperated. He said, "I don't understand, sir. What's my classification? What's happening?"

"Easy, son. You're all right. It could happen to anyone." He held out his hand and George took it mechanically. It was warm and it pressed George's hand firmly. "Sit down, son. I'm Sam Ellenford."

George nodded impatiently. "I want to know what's going on, sir."

"Of course. To begin with, you can't be a Computer Programmer, George. You've guessed that, I think."

"Yes, I have," said George bitterly. "What will I be, then?"

"That's the hard part to explain, George." He paused, then said with careful distinctness, "Nothing."

"*What!*"

"Nothing!"

"But what does that mean? Why can't you assign me a profession?"

"We have no choice in the matter, George. It's the structure of your mind that decides that."

George went a sallow yellow. His eyes bulged. "There's something wrong with my mind?"

"There's *something* about it. As far as professional classification is concerned, I suppose you can call it wrong."

"But why?"

Ellenford shrugged. "I'm sure you know how Earth runs its Educational program, George. Practically any human being can absorb practically any body of knowledge, but each individual brain pattern is better suited to receiving some types of knowledge than others. We try to match mind to knowledge as well as we can within the limits of the quota requirements for each profession."

George nodded. "Yes, I know."

"Every once in a while, George, we come up against a young man whose mind is not suited to receiving a superimposed knowledge of any sort."

"You mean I can't be Educated?"

"That is what I mean."

"But that's crazy. I'm intelligent. I can understand—" He looked helplessly about as though trying to find some way of proving that he had a functioning brain.

"Don't misunderstand me, please," said Ellenford gravely. "You're intelligent. There's no question about that. You're even above average in intelligence. Unfortunately that has nothing to do with whether the mind ought to be allowed to accept superimposed knowledge or not. In fact, it is almost always the intelligent person who comes here."

"You mean I can't even be a Registered Laborer?" babbled George. Suddenly even that was better than the blank that faced him. "What's there to know to be a Laborer?"

"Don't underestimate the Laborer, young man. There are dozens of subclassifications and each variety has its own corpus of fairly detailed knowledge. Do you think there's no skill in knowing the proper manner of lifting a weight? Besides, for the Laborer, we must select not only minds

suited to it, but bodies as well. You're not the type, George, to last long as a Laborer."

George was conscious of his slight build. He said, "But I've never heard of anyone without a profession."

"There aren't many," conceded Ellenford. "And we protect them."

"Protect them?" George felt confusion and fright grow higher inside him.

"You're a ward of the planet, George. From the time you walked through that door, we've been in charge of you." And he smiled.

It was a fond smile. To George it seemed the smile of ownership; the smile of a grown man for a helpless child.

He said, "You mean, I'm going to be in prison?"

"Of course not. You will simply be with others of your kind."

Your kind. The words made a kind of thunder in George's ears.

Ellenford said, "You need special treatment. We'll take care of you."

To George's own horror, he burst into tears. Ellenford walked to the other end of the room and faced away as though in thought.

George fought to reduce the agonized weeping to sobs and then to strangle those. He thought of his father and mother, of his friends, of Trevelyan, of his own shame—

He said rebelliously, "I learned to read."

"Everyone with a whole mind can do that. We've never found exceptions. It is at this stage that we discover—exceptions. And when you learned to read, George, we were concerned about your mind pattern. Certain peculiarities were reported even then by the doctor in charge."

"Can't you try Educating me? You haven't even tried. I'm willing to take the risk."

"The law forbids us to do that, George. But look, it will not be bad. We will explain matters to your family so they will not be hurt. At the place to which you'll be taken,

you'll be allowed privileges. We'll get you books and you can learn what you will."

"Dab knowledge in by hand," said George bitterly. "Shred by shred. Then, when I die I'll know enough to be a Registered Junior Office Boy, Paper-Clip Division."

"Yet I understand you've already been studying books."

George froze. He was struck devastatingly by sudden understanding. "That's it . . ."

"What is?"

"That fellow Antonelli. He's knifing me."

"No, George. You're quite wrong."

"Don't tell me that." George was in an ecstasy of fury. "That lousy bastard is selling me out because he thought I was a little too wise for him. I read books and tried to get a head start toward Programming. Well, what do you want to square things? Money? You won't get it. I'm getting out of here and when I finish broadcasting this—"

He was screaming.

Ellenford shook his head and touched a contact.

Two men entered on catfeet and got on either side of George. They pinned his arms to his sides. One of them used an air-spray hypodermic in the hollow of his right elbow and the hypnotic entered his vein and had an almost immediate effect.

His screams cut off and his head fell forward. His knees buckled and only the men on either side kept him erect as he slept.

They took care of George as they said they would; they were good to him and unfailingly kind—about the way, George thought, he himself would be to a sick kitten he had taken pity on.

They told him that he should sit up and take some interest in life; and then told him that most people who came there had the same attitude of despair at the beginning and that he would snap out of it.

He didn't even hear them.

Dr. Ellenford himself visited him to tell him that his parents had been informed that he was away on special assignment.

George muttered, "Do they know—"

Ellenford assured him at once, "We gave no details."

At first George had refused to eat. They fed him intravenously. They hid sharp objects and kept him under guard. Hali Omani came to be his roommate and his stolidity had a calming effect.

One day, out of sheer desperate boredom, George asked for a book. Omani, who himself read books constantly, looked up, smiling broadly. George almost withdrew the request then, rather than give any of them satisfaction, then thought: What do I care?

He didn't specify the book and Omani brought one on chemistry. It was in big print, with small words and many illustrations. It was for teen-agers. He threw the book violently against the wall.

That's what he would be always. A teen-ager all his life. A pre-Educate forever and special books would have to be written for him. He lay smoldering in bed, staring at the ceiling, and after an hour had passed, he got up sulkily, picked up the book, and began reading.

It took him a week to finish it and then he asked for another.

"Do you want me to take the first one back?" asked Omani.

George frowned. There were things in the book he had not understood, yet he was not so lost to shame as to say so.

But Omani said, "Come to think of it, you'd better keep it. Books are meant to be read and reread."

It was that same day that he finally yielded to Omani's invitation that he tour the place. He dogged at the Nigerian's feet and took in his surroundings with quick hostile glances.

The place was no prison certainly. There were no walls,

no locked doors, no guards. But it was a prison in that the inmates had no place to go outside.

It was somehow good to see others like himself by the dozen. It was so easy to believe himself to be the only one in the world so—maimed.

He mumbled, "How many people here anyway?"

"Two hundred and five, George, and this isn't the only place of the sort in the world. There are thousands."

Men looked up as he passed, wherever he went; in the gymnasium, along the tennis courts; through the library (he had never in his life imagined books could exist in such numbers; they were stacked, actually stacked, along long shelves). They stared at him curiously and he returned the looks savagely. At least *they* were no better than he; no call for *them* to look at him as though he were some sort of curiosity.

Most of them were in their twenties. George said suddenly, "What happens to the older ones?"

Omani said, "This place specializes in the younger ones." Then, as though he suddenly recognized an implication in George's question that he had missed earlier, he shook his head gravely and said, "They're not put out of the way, if that's what you mean. There are other Houses for older ones."

"Who cares?" mumbled George, who felt he was sounding too interested and in danger of slipping into surrender.

"You might. As you grow older, you will find yourself in a House with occupants of both sexes."

That surprised George somehow. "Women, too?"

"Of course. Do you suppose women are immune to this sort of thing?"

George thought of that with more interest and excitement than he had felt for anything since before that day when—He forced his thought away from that.

Omani stopped at the doorway of a room that contained a small closed-circuit television set and a desk computer.

Five or six men sat about the television. Omani said, "This is a classroom."

George said, "What's that?"

"The young men in there are being Educated. Not," he added, quickly, "in the usual way."

"You mean they're cramming it in bit by bit."

"That's right. This is the way everyone did it in ancient times."

This was what they kept telling him since he had come to the House but what of it? Suppose there had been a day when mankind had not known the diatherm-oven. Did that mean he should be satisfied to eat meat raw in a world where others ate it cooked?

He said, "Why do they want to go through that bit-by-bit stuff?"

"To pass the time, George, and because they're curious."

"What good does it do them?"

"It makes them happier."

George carried that thought to bed with him.

The next day he said to Omani ungraciously, "Can you get me into a classroom where I can find out something about Programming?"

Omani replied heartily, "Sure."

It was slow and he resented it. Why should someone have to explain something and explain it again? Why should he have to read and reread a passage, then stare at a mathematical relationship and not understand it at once? That wasn't how other people had to be.

Over and over again, he gave up. Once he refused to attend classes for a week.

But always he returned. The official in charge, who assigned reading, conducted the television demonstrations, and even explained difficult passages and concepts, never commented on the matter.

George was finally given a regular task in the gardens and took his turn in the various kitchen and cleaning details.

This was represented to him as being an advance, but he wasn't fooled. The place might have been far more mechanized than it was, but they deliberately made work for the young men in order to give them the illusion of worth-while occupation, of usefulness. George wasn't fooled.

They were even paid small sums of money out of which they could buy certain specified luxuries or which they could put aside for a problematical use in a problematical old age. George kept his money in an open jar, which he kept on a closet shelf. He had no idea how much he had accumulated. Nor did he care.

He made no real friends though he reached the stage where a civil good day was in order He even stopped brooding (or almost stopped) on the miscarriage of justice that had placed him there. He would go weeks without dreaming of Antonelli, of his gross nose and wattled neck, of the leer with which he would push George into a boiling quicksand and hold him under, till he woke screaming with Omani bending over him in concern.

Omani said to him on a snowy day in February, "It's amazing how you're adjusting."

But that was February, the thirteenth to be exact, his nineteenth birthday. March came, then April, and with the approach of May he realized he hadn't adjusted at all.

The previous May had passed unregarded while George was still in his bed, drooping and ambitionless. This May was different.

All over Earth, George knew, Olympics would be taking place and young men would be competing, matching their skills against one another in the fight for a place on a new world. There would be the holiday atmosphere, the excitement, the news reports, the self-contained recruiting agents from the worlds beyond space, the glory of victory or the consolations of defeat.

How much of fiction dealt with these motifs; how much of his own boyhood excitement lay in following the events

of Olympics from year to year; how many of his own plans—

George Platen could not conceal the longing in his voice. It was too much to suppress. He said, "Tomorrow's the first of May. Olympics!"

And that led to his first quarrel with Omani and to Omani's bitter enunciation of the exact name of the institution in which George found himself.

Omani gazed fixedly at George and said distinctly, "A House for the Feeble-minded."

George Platen flushed. Feeble-minded!

He rejected it desperately. He said in a monotone, "I'm leaving." He said it on impulse. His conscious mind learned it first from the statement as he uttered it.

Omani, who had returned to his book, looked up. "What?"

George knew what he was saying now. He said it fiercely, "I'm leaving."

"That's ridiculous. Sit down, George, calm yourself."

"Oh, no. I'm here on a frame-up, I tell you. This doctor, Antonelli, took a dislike to me. It's the sense of power these petty bureaucrats have. Cross them and they wipe out your life with a stylus mark on some card file."

"Are you back to that?"

"And staying there till it's all straightened out. I'm going to get to Antonelli somehow, break him, force the truth out of him." George was breathing heavily and he felt feverish. Olympics month was here and he couldn't let it pass. If he did, it would be the final surrender and he would be lost for all time.

Omani threw his legs over the side of his bed and stood up. He was nearly six feet tall and the expression on his face gave him the look of a concerned Saint Bernard. He put his arm about George's shoulder. "If I hurt your feelings—"

George shrugged him off. "You just said what you thought was the truth, and I'm going to prove it isn't the

truth, that's all. Why not? The door's open. There aren't any locks. No one ever said I couldn't leave. I'll just walk out."

"All right, but where will you go?"

"To the nearest air terminal, then to the nearest Olympics center. I've got money." He seized the open jar that held the wages he had put away. Some of the coins jangled to the floor.

"That will last you a week maybe. Then what?"

"By then I'll have things settled."

"By then you'll come crawling back here," said Omani earnestly, "with all the progress you've made to do over again. You're mad, George."

"Feeble-minded is the word you used before."

"Well, I'm sorry I did. Stay here, will you?"

"Are you going to try to stop me?"

Omani compressed his full lips. "No, I guess I won't. This is your business. If the only way you can learn is to buck the world and come back with blood on your face, go ahead.—Well, go ahead."

George was in the doorway now, looking back over his shoulder. "I'm going,"—he came back to pick up his pocket grooming set slowly—"I hope you don't object to my taking a few personal belongings."

Omani shrugged. He was in bed again reading, indifferent.

George lingered at the door again, but Omani didn't look up. George gritted his teeth, turned and walked rapidly down the empty corridor and out into the night-shrouded grounds.

He had expected to be stopped before leaving the grounds. He wasn't. He had stopped at an all-night diner to ask directions to an air terminal and expected the proprietor to call the police. That didn't happen. He summoned a skimmer to take him to the airport and the driver asked no questions.

Yet he felt no lift at that. He arrived at the airport sick at heart. He had not realized how the outer world would be.

He was surrounded by professionals. The diner's proprietor had had his name inscribed on the plastic shell over the cash register. So and so, Registered Cook. The man in the skimmer had his license up, Registered Chauffeur. George felt the bareness of his name and experienced a kind of nakedness because of it; worse, he felt skinned. But no one challenged him. No one studied him suspiciously and demanded proof of professional rating.

George thought bitterly: Who would imagine any human being without one?

He bought a ticket to San Francisco on the 3 A.M. plane. No other plane for a sizable Olympics center was leaving before morning and he wanted to wait as little as possible. As it was, he sat huddled in the waiting room, watching for the police. They did not come.

He was in San Francisco before noon and the noise of the city struck him like a blow. This was the largest city he had ever seen and he had been used to silence and calm for a year and a half now.

Worse, it was Olympics month. He almost forgot his own predicament in his sudden awareness that some of the noise, excitement, confusion was due to that.

The Olympics boards were up at the airport for the benefit of the incoming travelers, and crowds jostled around each one. Each major profession had its own board. Each listed directions to the Olympics Hall where the contest for that day for that profession would be given; the individuals competing and their city of birth; the Outworld (if any) sponsoring it.

It was a completely stylized thing. George had read descriptions often enough in the newsprints and films, watched matches on television, and even witnessed a small Olympics in the Registered Butcher classification at the county seat. Even that, which had no conceivable Galactic implication (there was no Outworlder in attendance, of course) aroused excitement enough.

Partly, the excitement was caused simply by the fact of

competition, partly by the spur of local pride (oh, when there was a hometown boy to cheer for, though he might be a complete stranger), and, of course, partly by betting. There was no way of stopping the last.

George found it difficult to approach the board. He found himself looking at the scurrying, avid onlookers in a new way.

There must have been a time when they themselves were Olympic material. What had *they* done? Nothing!

If they had been winners, they would be far out in the Galaxy somewhere, not stuck here on Earth. Whatever they were, their professions must have made them Earth-bait from the beginning; or else they made themselves Earth-bait by inefficiency at whatever high-specialized profession they had had.

Now these failures stood about and speculated on the chances of newer and younger men. Vultures!

How he wished they were speculating on him.

He moved down the line of boards blankly, clinging to the outskirts of the groups about them. He had eaten breakfast on the strato and he wasn't hungry. He was afraid, though. He was in a big city during the confusion of the beginning of Olympics competition. That was protection, sure. The city was full of strangers. No one would question George. No one would care about George.

No one would care. Not even the House, thought George bitterly. They cared for him like a sick kitten, but if a sick kitten up and wanders off, well, too bad, what can you do?

And now that he was in San Francisco, what did he do? His thoughts struck blankly against a wall. See someone? Whom? How? Where would he even stay? The money he had left seemed pitiful.

The first shamefaced thought of going back came to him. He could go to the police—He shook his head violently as though arguing with a material adversary.

A word caught his eye on one of the boards, gleaming there: *Metallurgist*. In smaller letters, *nonferrous*. At the

bottom of a long list of names, in flowing script, *sponsored by Novia.*

It induced painful memories: himself arguing with Trevelyan, so certain that he himself would be a Programmer, so certain that a Programmer was superior to a Metallurgist, so certain that he was following the right course, so certain that he was clever—

So clever that he had to boast to that small-minded, vindictive Antonelli. He had been so sure of himself that moment when he had been called and had left the nervous Trevelyan standing there, so cocksure.

George cried out in a short, incoherent high-pitched gasp. Someone turned to look at him, then hurried on. People brushed past impatiently pushing him this way and that. He remained staring at the board, openmouthed.

It was as though the board had answered his thought. He was thinking "Trevelyan" so hard that it had seemed for a moment that of course the board would say "Trevelyan" back at him.

But that *was* Trevelyan, up there. And *Armand* Trevelyan (Stubby's hated first name; up in lights for everyone to see) and the right hometown. What's more, Trev had wanted Novia, aimed for Novia, insisted on Novia; and this competition was sponsored by Novia.

This had to be Trev; good old Trev. Almost without thinking, he noted the directions for getting to the place of competition and took his place in line for a skimmer.

Then he thought somberly: Trev made it! He wanted to be a Metallurgist, and he made it!

George felt colder, more alone than ever.

There was a line waiting to enter the hall. Apparently, Metallurgy Olympics was to be an exciting and closely fought one. Al least, the illuminated sky sign above the hall said so, and the jostling crowd seemed to think so.

It would have been a rainy day, George thought, from the color of the sky, but San Francisco had drawn the shield

across its breadth from bay to ocean. It was an expense to do so, of course, but all expenses were warranted where the comfort of Outworlders was concerned. They would be in town for the Olympics. They were heavy spenders. And for each recruit taken, there would be a fee both to Earth and to the local government from the planet sponsoring the Olympics. It paid to keep Outworlders in mind of a particular city as a pleasant place in which to spend Olympics time. San Francisco knew what it was doing.

George, lost in thought, was suddenly aware of a gentle pressure on his shoulder blade and a voice saying, "Are you in line here, young man?"

The line had moved up without George's having noticed the widening gap. He stepped forward hastily and muttered, "Sorry, sir."

There was the touch of two fingers on the elbow of his jacket and he looked about furtively.

The man behind him nodded cheerfully. He had iron-gray hair, and under his jacket he wore an old-fashioned sweater that buttoned down the front. He said, "I didn't meant to sound sarcastic."

"No offense."

"All right, then." He sounded cozily talkative. "I wasn't sure you might not simply be standing there, entangled with the line, so to speak, only by accident. I thought you might be a—"

"A what?" said George sharply.

"Why, a contestant, of course. You look young."

George turned away. He felt neither cozy nor talkative, and bitterly impatient with busybodies.

A thought struck him. Had an alarm been sent out for him? Was his description known, or his picture? Was Gray-hair behind him trying to get a good look at his face?

He hadn't seen any news reports. He craned his neck to see the moving strip of news headlines parading across one section of the city shield, somewhat lackluster against the gray of the cloudy afternoon sky. It was no use. He gave up

at once. The headlines would never concern themselves with him. This was Olympics time and the only news worth headlining was the comparative scores of the winners and the trophies won by continents, nations, and cities.

It would go on like that for weeks, with scores calculated on a per capita basis and every city finding some way of calculating itself into a position of honor. His own town had once placed third in an Olympics covering Wiring Technician; third in the whole state. There was still a plaque saying so in Town Hall.

George hunched his head between his shoulders and shoved his hands in his pockets and decided that made him more noticeable. He relaxed and tried to look unconcerned, and felt no safer. He was in the lobby now, and no authoritative hand had yet been laid on his shoulder. He filed into the hall itself and moved as far forward as he could.

It was with an unpleasant shock that he noticed Gray-hair next to him. He looked away quickly and tried reasoning with himself. The man had been right behind him in line after all.

Gray-hair, beyond a brief and tentative smile, paid no attention to him and, besides, the Olympics was about to start. George rose in his seat to see if he could make out the position assigned to Trevelyan and at the moment that was all his concern.

The hall was moderate in size and shaped in the classical long oval, with the spectators in the two balconies running completely about the rim and the contestants in the linear trough down the center. The machines were set up, the progress boards above each bench were dark, except for the name and contest number of each man. The contestants themselves were on the scene, reading, talking together; one was checking his fingernails minutely. (It was, of course, considered bad form for any contestant to pay any

attention to the problem before him until the instant of the starting signal.)

George studied the program sheet he found in the appropriate slot in the arm of his chair and found Trevelyan's name. His number was twelve and, to George's chagrin, that was the wrong end of the hall. He could make out the figure of Contestant Twelve, standing with his hands in his pockets, back to his machine, and staring at the audience as though he were counting the house. George couldn't make out the face.

Still, that was Trev.

George sank back in his seat. He wondered if Trev would do well. He hoped, as a matter of conscious duty, that he would, and yet there was something within him that felt rebelliously resentful. George, professionless, here, watching. Trevelyan, Registered Metallurgist, Nonferrous, there, competing.

George wondered if Trevelyan had competed in his first year. Sometimes men did, if they felt particularly confident—or hurried. It involved a certain risk. However efficient the Educative process, a preliminary year on Earth ("oiling the stiff knowledge," as the expression went) insured a higher score.

If Trevelyan was repeating, maybe he wasn't doing so well. George felt ashamed that the thought pleased him just a bit.

He looked about. The stands were almost full. This would be a well-attended Olympics, which meant greater strain on the contestants—or greater drive, perhaps, depending on the individual.

Why Olympics, he thought suddenly? He had never known. Why was bread called bread?

Once he had asked his father: "Why do they call it Olympics, Dad?"

And his father had said: "Olympics means competition."

George had said: "Is when Stubby and I fight an Olympics, Dad?"

Platen, Senior, had said: "No. Olympics is a special kind of competition and don't ask silly questions. You'll know all you have to know when you get Educated."

George, back in the present, sighed and crowded down into his seat.

All you have to know!

Funny that the memory should be so clear now. "When you get Educated." No one ever said, "*If* you get Educated."

He always had asked silly questions, it seemed to him now. It was as though his mind had some instinctive foreknowledge of its inability to be Educated and had gone about asking questions in order to pick up scraps here and there as best it could.

And at the House they encouraged him to do so because they agreed with his mind's instinct. It was the only way.

He sat up suddenly. What the devil was he doing? Falling for that lie? Was it because Trev was there before him, an Educee, competing in the Olympics that he himself was surrendering?

He *wasn't* feeble-minded! No!

And the shout of denial in his mind was echoed by the sudden clamor in the audience as everyone got to his feet.

The box seat in the very center of one long side of the oval was filling with an entourage wearing the colors of Novia, and the word "Novia" went up above them on the main board.

Novia was a Grade A world with a large population and a thoroughly developed civilization, perhaps the best in the Galaxy. It was the kind of world that every Earthman wanted to live in someday; or, failing that, to see his children live in. (George remembered Trevelyan's insistence on Novia as a goal—and there he was competing for it.)

The lights went out in that section of the ceiling above the audience and so did the wall lights. The central trough, in which the contestants waited, became floodlit.

Again George tried to make out Trevelyan. Too far.

The clear, polished voice of the announcer sounded. "Distinguished Novian sponsors. Ladies. Gentlemen. The Olympics competition for Metallurgist, Nonferrous, is about to begin. The contestants are—"

Carefully and conscientiously, he read off the list in the program. Names. Home towns. Educative years. Each name received its cheers, the San Franciscans among them receiving the loudest. When Trevelyan's name was reached, George surprised himself by shouting and waving madly. The gray-haired man next to him surprised him even more by cheering likewise.

George could not help but stare in astonishment and his neighbor leaned over to say (speaking loudly in order to be heard over the hubbub), "No one here from my home town; I'll root for yours. Someone you know?"

George shrank back. "No."

"I noticed you looking in that direction. Would you like to borrow my glasses?"

"No. Thank you." (Why didn't the old fool mind his own business?)

The announcer went on with other formal details concerning the serial number of the competition, the method of timing and scoring and so on. Finally, he approached the meat of the matter and the audience grew silent as it listened.

"Each contestant will be supplied with a bar of nonferrous alloy of unspecified composition. He will be required to sample and assay the bar, reporting all results correctly to four decimals in per cent. All will utilize for this purpose a Beeman Microspectrograph, Model FX-2, each of which is, at the moment, not in working order."

There was an appreciative shout from the audience.

"Each contestant will be required to analyze the fault of his machine and correct it. Tools and spare parts are supplied. The spare part necessary may be not present, in which case it must be asked for, and time of delivery thereof

will be deducted from final time. Are all contestants ready?"

The board above Contestant Five flashed a frantic red signal. Contestant Five ran off the floor and returned a moment later. The audience laughed good-naturedly.

"Are all contestants ready?"

The boards remained blank.

"Any questions?"

Still blank.

"You may begin."

There was, of course, no way anyone in the audience could tell how any contestant was progressing except for whatever notations went up on the notice board. But then, that didn't matter. Except for what professional Metallurgists there might be in the audience, none would understand anything about the contest professionally in any case. What was important was who won, who was second, who was third. For those who had bets on the standings (illegal, but unpreventable) that was all-important. Everything else might go hang.

George watched as eagerly as the rest, glancing from one contestant to the next, observing how this one had removed the cover from his microspectrograph with deft strokes of a small instruments; how that one was peering into the face of the thing; how still a third was setting his alloy bar into its holder; and how a fourth adjusted a vernier with such small touches that he seemed momentarily frozen.

Trevelyan was as absorbed as the rest. George had no way of telling how he was doing.

The notice board over Contestant Seventeen flashed: Focus plate out of adjustment.

The audience cheered wildly.

Contestant Seventeen might be right and he might, of course, be wrong. If the latter, he would have to correct his diagnosis and lose time. Or he might never correct his

diagnosis and be unable to complete his analysis or, worse still, end with a completely wrong analysis.

Never mind. For the moment, the audience cheered.

Other boards lit up. George watched for Board Twelve. That came on finally: "Sample holder off-center. New clamp depresser needed."

An attendant went running to him with a new part. If Trevelyan was wrong, it would mean useless delay. Nor would the time elapsed in waiting for the part be deducted. George found himself holding his breath.

Results were beginning to go up on Board Seventeen, in gleaming letters: aluminum, 41.2649; magnesium, 22.1914; copper, 10.1001.

Here and there, other boards sprouting figures.

The audience was in bedlam.

George wondered how the contestants could work in such pandemonium, then wondered if that were not even a good thing. A first-class technician should work best under pressure.

Seventeen rose from his place as his board went-red-rimmed to signify completion. Four was only two seconds behind him. Another, than another.

Trevelyan was still working, the minor constituents of his alloy bar still unreported. With nearly all contestants standing, Trevelyan finally rose, also. Then, tailing off, Five rose, and received an ironic cheer.

It wasn't over. Official announcements were naturally delayed. Time elapsed was something, but accuracy was just as important. And not all diagnoses were of equal difficulty. A dozen factors had to be weighed.

Finally, the announcer's voice sounded, "Winner in the time of four minutes and twelve seconds, diagnosis correct, analysis correct within an average of zero point seven parts per hundred thousand, Contestant Number—*Seventeen*, Henry Anton Schmidt of—"

What followed was drowned in the screaming. Number Eight was next and then Four, whose good time was spoiled

by a five part in ten thousand error in the niobium figure. Twelve was never mentioned. He was an also-ran.

George made his way through the crowd to the Contestants' Door and found a large clot of humanity ahead of him. There would be weeping relatives (joy or sorrow, depending) to greet them, newsmen to interview the top-scorers, or the home-town boys, autograph hounds, publicity seekers and the just plain curious. Girls, too, who might hope to catch the eye of a top-scorer, almost certainly headed for Novia (or perhaps a low-scorer who needed consolation and had the cash to afford it).

George hung back. He saw no one he knew. With San Francisco so far from home, it seemed pretty safe to assume that there would be no relatives to condole with Trev on the spot.

Contestants emerged, smiling weakly, nodding at shouts of approval. Policemen kept the crowds far enough away to allow a lane for walking. Each high-scorer drew a portion of the crowd off with him, like a magnet pushing through a mound of iron filings.

When Trevelyan walked out, scarcely anyone was left. (George felt somehow that he had delayed coming out until just that had come to pass.) There was a cigarette in his dour mouth and he turned, eyes downcast, to walk off.

It was the first hint of home George had had in what was almost a year and a half and seemed almost a decade and a half. He was almost amazed that Trevelyan hadn't aged, that he was the same Trev he had last seen.

George sprang forward. "*Trev*!"

Trevelyan spun about, astonished. He stared at George and then his hand shot out. "George Platen, *what* the devil—"

And almost as soon as the look of pleasure had crossed his face, it left. His hand dropped before George had quite the chance of seizing it.

"Were you in there?" A curt jerk of Trev's head indicated the hall.

"I was."

"To see me?"

"Yes."

"Didn't do so well, did I?" He dropped his cigarette and stepped on it, staring off to the street, where the emerging crowd was slowly eddying and finding its way into skimmers, while new lines were forming for the next scheduled Olympics.

Trevelyan said heavily, "So what? It's only the second time I missed. Novia can go shove after the deal I got today. There are planets that would jump at me fast enough—But, listen, I haven't seen you since Education Day. Where did you go? Your folks said you were on special assignment but gave no details and you never wrote. You might have written."

"I should have," said George uneasily. "Anyway, I came to say I was sorry the way things went just now."

"Don't be," said Trevelyan. "I told you. Novia can go shove—At least that I should have known. They've been saying for weeks that the Beeman machine would be used. All the wise money was on Beeman machines. The damned Education tapes they ran through me were for Henslers and who uses Henslers? The worlds in the Goman Cluster if you want to call them worlds. Wasn't *that* a nice deal they gave me?"

"Can't you complain to—"

"Don't be a fool. They'll tell me my brain was built for Henslers. Go argue. *Everything* went wrong. I was the only one who had to send out for a piece of equipment. Notice that?"

"They deducted the time for that, though."

"Sure, but I lost time wondering if I could be right in my diagnosis when I noticed there wasn't any clamp depresser in the parts they had supplied. They don't deduct for that. If it had been a Hensler, I would have *known* I was right. How could I match up then? The top winner was a San Franciscan. So were three of the next four. And the fifth guy was

from Los Angeles. They get big-city Educational tapes. The best available. Beeman spectrographs and all. How do I compete with them? I came all the way out here just to get a chance at a Novian-sponsored Olympics in my classification and I might just as well have stayed home. I knew it, I tell you, and that settles it. Novia isn't the only chunk of rock in space. Of all the damned—"

He wasn't speaking to George. He wasn't speaking to anyone. He was just uncorked and frothing. George realized it.

George said, "If you knew in advance that the Beemans were going to be used, couldn't you have studied up on them?"

"They weren't in my tapes, I tell you."

"You could have read—books."

The last word had trailed off under Trevelyan's suddenly sharp look.

Trevelyan said, "Are you trying to make a big laugh out of this? You think this is funny? How do you expect me to read some book and try to memorize enough to match someone who *knows*."

"I thought—"

"You try it. You try—" Then suddenly, "What's your profession, by the way?" He sounded thoroughly hostile.

"Well—"

"Come on, now. If you're going to be a wise guy with me, let's see what you've done. You're still on Earth, I notice, so you're not a Computer Programmer and your special assignment can't be much."

George said, "Listen, Trev, I'm late for an appointment." He backed away, trying to smile.

"No, you don't." Trevelyan reached out fiercely, catching hold of George's jacket. "You answer my question. Why are you afraid to tell me? What is it with you? Don't come here rubbing a bad showing in my face, George, unless you can take it, too. Do you hear me?"

He was shaking George in frenzy and they were strug-

gling and swaying across the floor when the Voice of Doom struck George's ear in the form of a policeman's outraged call.

"All right now. *All* right. Break it up."

George's heart turned to lead and lurched sickeningly. The policeman would be taking names, asking to see identity cards, and George lacked one. He would be questioned and his lack of profession would show at once; and before Trevelyan, too, who ached with the pain of the drubbing he had taken and would spread the news back home as a salve for his own hurt feelings.

George couldn't stand that. He broke away from Trevelyan and made to run, but the policeman's heavy hand was on his shoulder. "Hold on, there. Let's see your identity card."

Trevelyan was fumbling for his, saying harshly, "I'm Armand Trevelyan, Metallurgist, Nonferrous. I was just competing in the Olympics. You better find out about him, though, officer."

George faced the two, lips dry and throat thickened past speech.

Another voice sounded, quiet, well-mannered. "Officer. One moment."

The policeman stepped back. "Yes, sir?"

"This young man is my guest. What is the trouble?"

George looked about in wild surprise. It was the gray-haired man who had been sitting next to him. Gray-hair nodded benignly at George.

Guest? Was he mad?

The policeman was saying, "These two were creating a disturbance, sir."

"Any criminal charges? Any damages?"

"No, sir."

"Well, then, I'll be responsible." He presented a small card to the policeman's view and the latter stepped back at once.

Trevelyan began indignantly, "Hold on, now—" but the policeman turned on him.

"All right, now. Got any charges?"

"I just—"

"On your way. The rest of you—move on." A sizable crowd had gathered, which now, reluctantly, unknotted itself and raveled away.

George let himself be led to a skimmer but balked at entering.

He said, "Thank you, but I'm not your guest." (Could it be a ridiculous case of mistaken identity?)

But Gray-hair smiled and said, "You weren't but you are now. Let me introduce myself, I'm Ladislas Ingenescu, Registered Historian."

"But—"

"Come, you will come to no harm, I assure you. After all, I only wanted to spare you some trouble with a policeman."

"But why?"

"Do you want a reason? Well, then, say that we're honorary towns-mates, you and I. We both shouted for the same man, remember, and we townspeople must stick together, even if the tie is only honorary. Eh?"

And George, completely unsure of this man, Ingenescu, and of himself as well, found himself inside the skimmer. Before he could make up his mind that he ought to get off again, they were off the ground.

He thought confusedly: The man has some status. The policeman deferred to him.

He was almost forgetting that his real purpose here in San Francisco was not to find Trevelyan but to find some person with enough influence to force a reappraisal of his own capacity of Education.

It could be that Ingenescu was such a man. And right in George's lap.

Everything could be working out fine—fine. Yet it sounded hollow in his thoughts. He was uneasy.

• • •

During the short skimmer-hop, Ingenescu kept up an even flow of small-talk, pointing out the landmarks of the city, reminiscing about past Olympics he had seen. George, who paid just enough attention to make vague sounds during the pauses, watched the route of flight anxiously.

Would they head for one of the shield-openings and leave the city altogether?

No, they headed downward, and George sighed his relief softly. He felt safer in the city.

The skimmer landed at the roof-entry of a hotel and, as he alighted, Ingenescu said, "I hope you'll eat dinner with me in my room?"

George said, "Yes," and grinned unaffectedly. He was just beginning to realize the gap left within him by a missing lunch.

Ingenescu let George eat in silence. Night closed in and the wall lights went on automatically. (George thought: I've been on my own almost twenty-four hours.)

And then over the coffee, Ingenescu finally spoke again. He said, "You've been acting as though you think I intend you harm."

George reddened, put down his cup and tried to deny it, but the older man laughed and shook his head.

"It's so. I've been watching you closely since I first saw you and I think I know a great deal about you now."

George half rose in horror.

Ingenescu said, "But sit down. I only want to help you."

George sat down but his thoughts were in a whirl. If the old man knew who he was, why had he not left him to the policeman? On the other hand, why should he volunteer help?

Ingenescu said, "You want to know why I should want to help you? Oh, don't look alarmed. I can't read minds. It's just that my training enables me to judge the little reactions that give minds away, you see. Do you understand that?"

George shook his head.

Ingenescu said, "Consider my first sight of you. You were waiting in line to watch an Olympics, and your micro-reactions didn't match what you were doing. The expression of your face was wrong, the action of your hands was wrong. It meant that something, in general, was wrong, and the interesting thing was that, whatever it was, it was nothing common, nothing obvious. Perhaps, I thought, it was something of which your own conscious mind was unaware.

"I couldn't help but follow you, sit next to you. I followed you again when you left and eavesdropped on the conversation between your friend and yourself. After that, well, you were far too interesting an object of study—I'm sorry if that sounds cold-blooded—for me to allow you to be taken off by a policeman.—Now tell me, what is it that troubles you?"

George was in an agony of indecision. If this was a trap, why should it be such an indirect, roundabout one? And he *had* to turn to someone. He had come to the city to find help and here was help being offered. Perhaps what was wrong was that it was being offered. It came too easy.

Ingenescu said, "Of course, what you tell me as a Social Scientist is a privileged communication. Do you know what that means?"

"No, sir."

"It means, it would be dishonorable for me to repeat what you say to anyone for any purpose. Moreover no one has the legal right to compel me to repeat it."

George said, with sudden suspicion, "I thought you were a Historian."

"So I am."

"Just now you said you were a Social Scientist."

Ingenescu broke into loud laughter and apologized for it when he could talk. "I'm sorry, young man, I shouldn't laugh, and I wasn't really laughing at you. I was laughing at Earth and its emphasis on physical science, and the practical segments of it at that. I'll bet you can rattle off every

subdivision of construction technology or mechanical engineering and yet you're a blank on social science."

"Well, then what *is* social science?"

"Social science studies groups of human beings and there are many high-specialized branches to it, just as there are to zoology, for instance. For instance, there are Culturists, who study the mechanics of cultures, their growth, development, and decay. Cultures," he added, forestalling a question, "are all the aspects of a way of life. For instance, it includes the way we make our living, the things we enjoy and believe, what we consider good and bad and so on. Do you understand?"

"I think I do."

"An Economist—not an Economic Statistician, now, but an Economist—specializes in the study of the way a culture supplies the bodily needs of its individual members. A Psychologist specializes in the individual member of a society and how he is affected by the society. A Futurist specializes in planning the future course of a society, and a Historian—That's where I come in, now."

"Yes, sir."

"A Historian specializes in the past development of our own society and of societies with other cultures."

George found himself interested. "Was it different in the past?"

"I should say it was. Until a thousand years ago, there was no Education; not what we call Education, at least."

George said, "I know. People learned in bits and pieces out of books."

"Why, how do you know this?"

"I've heard it said, " said George cautiously. Then, "Is there any use in worrying about what's happened long ago? I mean, it's all done with, isn't it?"

"It's never done with, my boy. The past explains the present. For instance, why is our Educational system what it is?"

George stirred restlessly. The man kept bringing the

subject back to that. He said snappishly, "Because it's best."

"Ah, but why is it best? Now you listen to me for one moment and I'll explain. Then you can tell me if there is any use in history. Even before interstellar travel was developed—" He broke off at the look of complete astonishment on George's face. "Well, did you think we always had it?"

"I never gave it any thought, sir."

"I'm sure you didn't. But there was a time, four or five thousand years ago when mankind was confined to the surface of Earth. Even then, his culture had grown quite technological and his numbers had increased to the point where any failure in technology would have meant mass starvation and disease. To maintain the technological level and advance it in the face of an increasing population, more and more technicians and scientists had to be trained, and yet, as science advanced, it took longer and longer to train them.

"As first interplanetary and then interstellar travel was developed, the problem grew more acute. In fact, actual colonization of extra-Solar planets was impossible for about fifteen hundred years because of lack of properly trained men.

"The turning point came when the mechanics of the storage of knowledge within the brain was worked out. Once that had been done, it became possible to devise Educational tapes that would modify the mechanics in such a way as to place within the mind a body of knowledge ready-made so to speak. But you know about *that*.

"Once that was done, trained men could be turned out by the thousands and millions, and we could begin what someone has since called the 'Filling of the Universe.' There are now fifteen hundred inhabited planets in the Galaxy and there is no end in sight."

"Do you see all that is involved? Earth exports Education tapes for low-specialized professions and that keeps the

Galactic culture unified. For instance, the Reading tapes insure a single language for all of us.—Don't look so surprised, other languages are possible, and in the past were used. Hundreds of them.

"Earth also exports high-specialized professionals and keeps its own population at an endurable level. Since they are shipped out in a balanced sex ratio, they act as self-reproductive units and help increase the populations on the Outworlds where an increase is needed. Furthermore, tapes and men are paid for in material which we much need and on which our economy depends. *Now* do you understand why our Education is the best way?"

"Yes, sir."

"Does it help you to understand, knowing that without it, interstellar colonization was impossible for fifteen hundred years?"

"Yes, sir."

"Then you see the uses of history." The Historian smiled. "And now I wonder if you see why I'm interested in you?"

George snapped out of time and space back to reality. Ingenescu, apparently, didn't talk aimlessly. All this lecture had been a device to attack him from a new angle.

He said, once again withdrawn, hesitating. "Why?"

"Social Scientists work with societies and societies are made up of people."

"All right."

"But people aren't machines. The professionals in physical science work with machines. There is only a limited amount to know about a machine and the professionals know it all. Furthermore, all machines of a given sort are just about alike so that there is nothing to interest them in any given individual machine. But people, ah—They are so complex and so different one from another that a Social Scientist never knows all there is to know or even part of what there is to know. To understand his own specialty, he must always be ready to study people; particularly unusual specimens."

"Like me," said George tonelessly.

"I shouldn't call you a specimen, I suppose, but you are unusual. You're worth studying, and if you will allow that privilege then, in return, I will help you if you are in trouble and if I can."

There were pin wheels whirring in George's mind.—All this talk about people and colonization made possible by Education. It was as though caked thoughts within him were being broken up and strewn about mercilessly.

He said, "Let me think," and clamped his hands over his ears.

He took them away and said to the Historian, "Will you do something for me, sir?"

"If I can," said the Historian amiably.

"And everything I say in this room is a privileged communication. You said so."

"And I meant it."

"Then get me an interview with an Outworld official, with—with a Novian."

Ingenescu looked startled. "Well, now—"

"You can do it," said George earnestly. "You're an important official. I saw the policeman's look when you put that card in front of his eyes. If you refuse, I—won't let you study me."

It sounded a silly threat in George's own ears, one without force. On Ingenescu, however, it seemed to have a strong effect.

He said, "That's an impossible condition. A Novian in Olympics month—"

"All right, then, get me a Novian on the phone and I'll make my own arrangements for an interview."

"Do you think you can?"

"I know I can. Wait and see."

Ingenescu stared at George thoughtfully and then reached for the visiphone.

George waited, half drunk with his new outlook on the whole problem and the sense of power it brought. It

couldn't miss. It *couldn't* miss. He would be a Novian yet. He would leave Earth in triumph despite Antonelli and the whole crew of fools at the House for the (he almost laughed aloud) Feeble-minded.

George watched eagerly as the visiplate lit up. It would open up a window into a room of Novians, a window into a small patch of Novia transplanted to Earth. In twenty-four hours, he had accomplished that much.

There was a burst of laughter as the plate unmisted and sharpened, but for the moment no single head could be seen but rather the fast passing of the shadows of men and women, this way and that. A voice was heard, clear-worded over a background of babble. "Ingenescu? He wants me?"

Then there he was, staring out of the plate. A Novia. A genuine Novia. (George had not an atom of doubt. There was something completely Outworldly about him. Nothing that could be completely defined, or even momentarily mistaken.)

He was swarthy in complexion with a dark wave of hair combed rigidly back from his forehead. He wore a thin black mustache and a pointed beard, just as dark, that scarcely reached below the lower limit of his narrow chin, but the rest of his face was so smooth that it looked as though it had been depilated permanently.

He was smiling. "Ladislas, this goes too far. We fully expect to be spied on, within reason, during our stay on Earth, but mind reading is out of bounds."

"Mind reading, Honorable?"

"Confess! You knew I was going to call you this evening. You knew I was only waiting to finish this drink." His hand moved up into view and his eye peered through a small glass of a faintly violet liqueur. "I can't offer you one, I'm afraid."

George, out of range of Ingenescu's transmitter could not be seen by the Novian. He was relieved at that. He wanted time to compose himself and he needed it badly. It was as

though he were made up exclusively of restless fingers, drumming, drumming—

But he was right. He hadn't miscalculated. Ingenescu *was* important. The Novian called him by his first name.

Good! Things worked well. What George had lost on Antonelli, he would make up, with advantage, on Ingenescu. And someday, when he was on his own at last, and could come back to Earth as powerful a Novian as this one who could negligently joke with Ingenescu's first name and be addressed as "Honorable" in turn—when he came back, he would settle with Antonelli. He had a year and a half to pay back and he—

He all but lost his balance on the brink of the enticing daydream and snapped back in sudden anxious realization that he was losing the thread of what was going on.

The Novian was saying, "—doesn't hold water. Novia has a civilization as complicated and advanced as Earth's. We're not Zeston, after all. It's ridiculous that we have to come here for individual technicians."

Ingenescu said soothingly, "Only for new models. There is never any certainty that new models will be needed. To buy the Educational tapes would cost you the same price as a thousand technicians and how do you know you would need that many?"

The Novian tossed off what remained of his drink and laughed. (It displeased George, somehow, that a Novian should be this frivolous. He wondered uneasily if perhaps the Novian ought not to have skipped that drink and even the one or two before that.)

The Novian said, "That's typical pious fraud, Ladislas. You know we can make use of all the late models we can get. I collected five Metallurgists this afternoon—"

"I know," said Ingenescu. "I was there."

"Watching me! Spying!" cried the Novia. "I'll tell you what it is. The new-model Metallurgists I got differed from the previous model only in knowing the use of Beeman Spectrographs. The tapes couldn't be modified that much,

not that much" (he held up two fingers close together) "from last year's model. You introduce the new models only to *make* us buy and spend and come here hat in hand."

"We don't *make* you buy."

"No, but you sell late-model technicians to Landonum and so we have to keep pace. It's a merry-go-round you have us on, you pious Earthmen, but watch out, there may be an exit somewhere." There was a sharp edge to his laugh, and it ended sooner than it should have.

Ingenescu said, "In all honesty, I hope there is. Meanwhile, as to the purpose of my call—"

"That's right, *you* called. Oh, well, I've said my say and I suppose next year there'll be a new model of Metallurgist anyway for us to spend goods on, probably with a new gimmick for niobium assays and nothing else altered and the next year—But go on, what is it you want?"

"I have a young man here to whom I wish you to speak."

"Oh?" The Novian looked not completely pleased with that. "Concerning what?"

"I can't say. He hasn't told me. For that matter he hasn't even told me his name and profession."

The Novian frowned. "Then why take up my time?"

"He seems quite confident that you will be interested in what he has to say."

"I dare say."

"And," said Ingenescu, "as a favor to me."

The Novian shrugged. "Put him on and tell him to make it short."

Ingenescu stepped aside and whispered to George, "Address him as 'Honorable.'"

George swallowed with difficulty. This was it.

George felt himself going moist with perspiration. The thought had come so recently, yet it was in him now so certainly. The beginnings of it had come when he had spoken to Trevelyan, then everything had fermented and billowed into shape while Ingenescu had prattled, and then

the Novian's own remarks had seemed to nail it all into place.

George said, "Honorable, I've come to show you the exit from the merry-go-round." Deliberately, he adopted the Novian's own methaphor.

The Novian stared at him gravely. "What merry-go-round?"

"You yourself mentioned it, Honorable. The merry-go-round that Novia is on when you come to Earth to—to get technicians." (He couldn't keep his teeth from chattering; from excitement, not fear.)

The Novian said, "You're trying to say that you know a way by which we can avoid patronizing Earth's mental super-market. Is that it?"

"Yes, sir. You can control your own Educational system."

"Umm. Without tapes?"

"Y—yes, Honorable."

The Novian, without taking his eyes from George, called out, "Ingenescu, get into view."

The Historian moved to where he could be seen over George's shoulder.

The Novian said, "What is this? I don't seem to penetrate."

"I assure you solemnly," said Ingenescu, "that whatever this is it is being done on the young man's own initiative, Honorable. I have not inspired this. I have nothing to do with it."

"Well, then, what is the young man to you? Why do you call me on his behalf?"

Ingenescu said, "He is an object of study, Honorable. He has value to me and I humor him."

"What kind of value?"

"It's difficult to explain; a matter of my profession."

The Novian laughed shortly. "Well, to each his profession." He nodded to an invisible person or persons outside plate range. "There's a young man here, a protégé of

Ingenescu or some such thing, who will explain to us how to Educate without tapes." He snapped his fingers, and another glass of pale liqueur appeared in his hand. "Well, young man?"

The faces on the plate were multiple now. Men and women, both, crammed in for a view of George, their faces molded into various shades of amusement and curiosity.

George tried to look disdainful. They were all, in their own ways, Novians as well as the Earthman, "studying" him as though he were a bug on a pin. Ingenescu was sitting in a corner, now, watching him owl-eyed.

Fools, he thought tensely, one and all. But they would have to understand. He would *make* them understand.

He said, "I was at the Metallurgist Olympics this afternoon."

"You, too?" said the Novian blandly. "It seems all Earth was there."

"No, Honorable, but I was. I had a friend who competed and who made out very badly because you were using the Beeman machines. His education had included only the Henslers, apparently on older model. You said the modification involved was slight." George held up two fingers close together in conscious mimicry of the other's previous gesture. "And my friend had known some time in advance that knowledge of the Beeman machines would be required."

"And what does that signify?"

"It was my friend's lifelong ambition to qualify for Novia. He already knew the Henslers. He had to know the Beemans to qualify and he knew that. To learn about the Beemans would have taken just a few more facts, a bit more data, a small amount of practice perhaps. With a life's ambition riding the scale, he might have managed this—"

"And where would he have obtained a tape for the additional facts and data? Or has Education become a private matter for home study here on Earth?"

There was dutiful laughter from the faces in the background.

George said, "That's why he didn't learn, Honorable. He thought he needed a tape. He wouldn't even try without one, no matter what the prize. He refused to try without a tape."

"Refused, eh? Probably the type of fellow who would refuse to fly without a skimmer." More laughter and the Novian thawed into a smile and said, "The fellow is amusing. Go on. I'll give you another few moments."

George said tensely, "Don't think this is a joke. Tapes are actually bad. They teach too much; they're too painless. A man who learns that way doesn't know how to learn any other way. He's frozen into whatever position he's been taped. Now if a person *weren't* given tapes but were forced to learn by hand, so to speak, from the start; why, then he'd get the habit of learning, and continue to learn. Isn't that reasonable? Once he has the habit well developed he can be given just a small amount of tape-knowledge, perhaps, to fill in gaps or fix details. Then he can make further progress on his own. You can make Beeman Metallurgists out of your own Hensler Metallurgists in that way and not have to come to Earth for new models."

The Novian nodded and sipped at his drink. "And where does everyone get knowledge without tapes? From interstellar vacuum?"

"From books. By studying the instruments themselves. By *thinking*."

"Books? How does one understand books without Education?"

"Books are in words. Words can be understood for the most part. Specialized words can be explained by the technicians you already have."

"What about reading? Will you allow reading tapes?"

"Reading tapes are all right, I suppose, but there's no reason you can't learn to read the old way, too. At least in part."

The Novian said, "So that you can develop good habits from the start?"

"Yes, yes," George said gleefully. The man was beginning to understand.

"And what about mathematics?"

"That's the easiest of all, sir—Honorable. Mathematics is different from other technical subjects. It starts with certain simple principles and proceeds by steps. You can start with nothing and learn. It's practically designed for that. Then, once you know the proper types of mathematics, other technical books become quite understandable. Especially if you start with easy ones."

"Are there easy books?"

"Definitely. Even if there weren't, the technicians you now have can try to write easy books. Some of them might be able to put some of the knowledge into words and symbols."

"Good Lord," said the Novian to the men clustered about him. "The young devil has an answer for everything."

"I have. I have," shouted George. "Ask me."

"Have you tried learning from books yourself? Or is this just theory with you?"

George turned to look quickly at Ingenescu, but the Historian was passive. There was no sign of anything but gentle interest in his face.

George said, "I have."

"And do you find it works?"

"Yes, Honorable," said George eagerly. "Take me with you to Novia. I can set up a program and direct—"

"Wait, I have a few more questions. How long would it take, do you suppose, for you to become a Metallurgist capable of handling a Beeman machine, supposing you started from nothing and did not use Educational tapes?"

George hesitated. "Well—years, perhaps."

"Two years? Five? Ten?"

"I can't say, Honorable."

"Well, there's a vital question to which you have no

answer, have you? Shall we say five years? Does that sound reasonable to you?"

"I suppose so."

"All right. We have a technician studying metallurgy according to this method of yours for five years. He's no good to us during that time, you'll admit, but he must be fed and housed and paid all that time."

"But—"

"Let me finish. Then when he's done and can use the Beeman, five years have passed. Don't you suppose we'll have modified Beemans then which he *won't* be able to use?"

"But by then he'll be expert on learning. He could learn the new details necessary in a matter of days."

"So you say. And suppose this friend of yours, for instance, had studied up on the Beemans on his own and managed to learn it; would he be as expert in its use as a competitor who had learned it off the tapes?"

"Maybe not—" began George.

"Ah," said the Novian.

"Wait, let *me* finish. Even if he doesn't know something as well, it's ability to learn further that's important. He may be able to think up things, new things that no tape-Educated man would. You'll have a reservoir of original thinkers—"

"In your studying," said the Novian, "have you thought up any new things?"

"No, but I'm just one man and I haven't studied long—"

"Yes. —Well, ladies, and gentlemen, have we been sufficiently amused?"

"Wait," cried George, in sudden panic. "I want to arrange a personal interview. There are things I can't explain over the visiphone. There are details—"

The Novian looked past George. "Ingenescu! I think I have done you your favor. Now, really, I have a heavy schedule tomorrow. Be well!"

The screen went blank.

• • •

George's hands shot out toward the screen, as though in a wild impulse to shake life back into it. He cried out, "He didn't believe me. He didn't believe me."

Ingenescu said, "No, George. Did you really think he would?"

George scarcely heard him. "But why not? It's all true. It's all so much to his advantage. No risk. I and a few men to work with—A dozen men training for years would cost less than one technician.—He was drunk! Drunk! He didn't understand."

George looked breathlessly. "How do I get to him? I've got to. This was wrong. Shouldn't have used the visiphone. I need time. Face to face. How do I—"

Ingenescu said, "He won't see you, George. And if he did, he wouldn't believe you."

"He will, I tell you. When he isn't drinking. He—" George turned squarely toward the Historian and his eyes widened. "Why do you call me George?"

"Isn't that your name? George Platen?"

"You know me?"

"All about you."

George was motionless except for the breath pumping his chest wall up and down.

Ingenescu said, "I want to help you, George. I told you that. I've been studying you and I want to help you."

George screamed, "I don't need help. I'm not feeble-minded. The whole world is, but I'm not." He whirled and dashed madly for the door.

He flung it open and two policemen roused themselves suddenly from their guard duty and seized him.

For all George's straining, he could feel the hypo-spray at the fleshy point just under the corner of his jaw, and that was it. The last thing he remembered was the face of Ingenescu, watching with gentle concern.

George opened his eyes to the whiteness of a ceiling. He remembered what had happened. He remembered it dis-

tantly as though it had happened to somebody else. He stared at the ceiling till the whiteness filled his eyes and washed his brain clean, leaving room, it seemed, for new thought and new ways of thinking.

He didn't know how long he lay there so, listening to the drift of his own thinking.

There was a voice in his ear. "Are you awake?"

And George heard his own moaning for the first time. Had he been moaning? He tried to turn his head.

The voice said, "Are you in pain, George?"

George whispered, "Funny. I was so anxious to leave Earth. I didn't understand."

"Do you know where you are?"

"Back in the—the House." George managed to turn. The voice belonged to Omani.

George said, "It's funny I didn't understand."

Omani smiled gently, "Sleep again—"

George slept.

And woke again. His mind was clear.

Omani sat at the bedside reading, but he put down the book as George's eyes opened.

George struggled to a sitting position. He said, "Hello."

"Are you hungry?"

"You bet." He stared at Omani curiously. "I was followed when I left, wasn't I?"

Omani nodded. "You were under observation at all times. We were going to maneuver you to Antonelli and let you discharge your aggressions. We felt that to be the only way you could make progress. Your emotions were clogging your advance."

George said, with a trace of embarrassment, "I was all wrong about him."

"It doesn't matter now. When you stopped to stare at the Metallurgy notice board at the airport, one of our agents reported back the list of names. You and I had talked about

your past sufficiently so that I caught the significance of Trevelyan's name there. You asked for directions to the Olympics; there was the possibility that this might result in the kind of crisis we were hoping for; we sent Ladislas Ingenescu to the hall to meet you and take over."

"He's an important man in the government, isn't he?"

"Yes, he is."

"And you had him take over. It makes me sound important."

"You *are* important, George."

A thick stew had arrived, steaming, fragrant. George grinned wolfishly and pushed his sheets back to free his arms. Omani helped arrange the bed-table. For a while, George ate silently.

Then George said, "I woke up here once before just for a short time."

Omani said, "I know. I was here."

"Yes, I remember. You know, everything was changed. It was as though I was too tired to feel emotion. I wasn't angry any more. I could just think. It was as though I had been drugged to wipe out emotion."

"You weren't," said Omani. "Just sedation. You had rested."

"Well, anyway, it was all clear to me, as though I had known it all the time but wouldn't listen to myself. I thought: What was it I had wanted Novia to let me do? I had wanted to go to Novia and take a batch of un-Educated youngsters and teach them out of books. I had wanted to establish a House for the Feeble-minded—like here—and Earth already has them—many of them."

Omani's white teeth gleamed as he smiled. "The Institute of Higher Studies is the correct name for places like this."

"Now I see it," said George, "so easily I am amazed at my blindness before. After all, who invents the new instrument models that require new-model technicians? Who invented the Beeman spectrographs, for instance? A

man called Beeman, I suppose, but he couldn't have been tape-Educated or how could he have made the advance?"

"Exactly."

"Or who makes Educational tapes? Special tape-making technicians? Then who makes the tapes to train *them*? More advanced technicians? Then who makes the tapes—You see what I mean. Somewhere there has to be an end. Somewhere there must be men and women with capacity for original thought."

"Yes, George."

George leaned back, stared over Omani's head, and for a moment there was the return of something like restlessness to his eyes.

"Why wasn't I told all this at the beginning?"

"Oh, if we could," said Omani, "the trouble it would save us. We can analyze a mind, George, and say this one will make an adequate architect and that one a good woodworker. We know of no way of detecting the capacity for original, creative thought. It is too subtle a thing. We have some rule-of-thumb methods that mark out individuals who may possibly or potentially have such a talent.

"On Reading Day, such individuals are reported. You were, for instance. Roughly speaking, the number so reported comes to one in ten thousand. By the time Education Day arrives, these individuals are checked again, and nine out of ten of them turn out to have been false alarms. Those who remain are sent to places like this."

George said, "Well, what's wrong with telling people that one out of—of a hundred thousand will end at places like these? Then it won't be such a shock to those who do."

"And those who don't? The ninety-nine thousand nine hundred and ninety-nine that don't? We can't have all those people considering themselves failures. They aim at the professions and one way or another they all make it. Everyone can place after his or her name: Registered something-or-other. In one fashion or another every individual has his or her place in society and this is necessary."

"But we?" said George. "The one in ten thousand exception?"

"You can't be told. That's exactly it. It's the final test. Even after we've thinned out the possibilities on Education Day, nine out of ten of those who come here are not quite the material of creative genius, and there's no way we can distinguish those nine from the tenth that we want by any form of machinery. The tenth one must tell us himself."

"How?"

"We bring you here to a House for the Feeble-minded and the man who won't accept that is the man we want. It's a method that can be cruel, but it works. It won't do to say to a man, 'You can create. Do.' It is much safer to wait for a man to say, 'I can create, and I will do so whether you wish it or not.' There are ten thousand men like you, George, who support the advancing technology of fifteen hundred worlds. We can't allow ourselves to miss one recruit to that number or waste our efforts on one member who doesn't measure up."

George pushed his empty plate out of the way and lifted a cup of coffee to his lips.

"What about the people here who don't—measure up?"

"They are taped eventually and become our Social Scientists. Ingenescu is one. I am a Registered Psychologist. We are second echelon, so to speak."

George finished his coffee. He said, "I still wonder about one thing?"

"What is that?"

George threw aside the sheet and stood up. "Why do they call them Olympics?"

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